**Animal research is a divisive issue and continues to be widely discussed around the world. The psychological consequences of this research, however, have been largely ignored. Putting aside for a moment the torrent of moral arguments both for and against this research, the effects on its perpetrators is examined.**

In 2013 I read a thought-provoking blog post by [Dr Zipporah Weisberg](http://queensanimaldefence.org/?s=zipporah) on the website [Queens's Animal Defence](http://queensanimaldefence.org/). It touched on the potential, and often ignored or dismissed, psychological consequences to those who are involved in the death of animals. In this case it focused on animal researchers, although the consequences are similar in vets involved in euthanising healthy animals, abattoir workers and other groups [1-3,7]. It was entitled "[The Double Trauma of Animal Experimentation".](http://queensanimaldefence.org/2013/12/04/the-double-trauma-of-animal-experimentation/)

I came across this post again while browsing my Evernote journal a few days ago and thought it was important and well worth further discussion. The article deals mostly with the widely recognised trauma caused to laboratory animals, for example the prevalence of (PTSD) in non-human primates and other species, and of course the widespread distress caused by many experimental procedures. It then goes on to discuss the psychological impact on animal researchers. The specific condition described was Perpetration-Induced Traumatic Stress (PITS), which is similar to PTSD but distinguished mainly by the absence of perceived life-threatening danger to the protagonist. It begins:

*It is important that people are also made aware of the harm animal research causes to researchers themselves.*

*Researchers are not bad people.*

Despite widely-held beliefs about martial instincts from our caveman past, human beings are not natural killers. Studies of soldiers' behaviour during World War II by S.L.A. Marshall revealed that they exhibited an "innate resistance" to killing and in fact a significant proportion of them had never even fired their weapons. During later wars such as Vietnam, enhanced battle training resulting from Marshall's findings meant that most soldiers were now firing their weapons [4]. However, many sources describe soldiers "aiming high" or deliberately missing enemy combatants, even under optimal combat conditions. PITS was proposed as a variant of PTSD by psychologist and sociologist Rachel MacNair in 2002, when it was established that American Vietnam War veterans who had actually killed people or believed that they had contributed to such deaths were much more likely to exhibit PTSD symptoms than those who had merely witnessed the violence [2,3].

Symptoms of PITS occur in clusters, are similar to those of PTSD and vary in severity. They may include intrusive flashbacks and eidetic nightmares (often depicting the researcher as the victim of the same procedures he/she has carried out), insomnia, hypervigilance, alienation and outbursts of anger. Alcohol and/or substance abuse is is also common.

Co-morbid depression and anxiety are common in PITS cases, as are feelings of intense loss, shame and guilt. PITS itself is not thought to lead directly to other mental health issues, but it seems to be much more common in those already living with them [3].

1. Rohlf V, Bennett P. Perpetration-induced traumatic stress in persons who euthanize nonhuman animals in surgeries, animal shelters, and laboratories. Society and Animals, 2005 vol. 13(3), pp. 201-219.
2. Whiting, T and Marion, CR. Perpetration-induced traumatic stress — A risk for veterinarians involved in the destruction of healthy animals. Canadian Veterinary Journal, 2011, vol.52, pp. 794-796.
3. MacNair, RM. Perpetration-Induced Traumatic Stress: The Psychological Consequences of Killing (Psychological Dimensions to War and Peace). Authors Choice Press 2005, ISBN: 0595347649.
4. Grossman, D. (Lt. Col). On Killing: The Psychological Cost of Learning to Kill in War and Society. Lt.Col. Dave Grossman, Open Road Media 2014, ISBN: 0316330000.
5. Tannsjo, T. Taking Life: Three Theories on the Ethics of Killing. Oxford University Press 2015, ISBN: 0316040932.
6. Staub E. Reconciliation after genocide, mass killing, or intractable conflict: Understanding the roots of violence, psychological recovery, and steps towards a general theory. Political Psychology, 2006, vol. 27, pp. 867–894.
7. Orzechowski, K. Maximum Tolerated Dose. https://maximumtolerateddose.vhx.tv