

his article is based on a panel discussion held at the New York City Bar Association in conjunction with the Capital Punishment Committee. It features information presented by three panelists: Dr. Jerid M. Fisher, a forensic neuropsychologist; Irina Komarovskaya, PhD, the clinic director at the Steven A. Cohen Military Family Clinic at the NYU Langone Medical Center; and Art Cody, the deputy director of the New York State Defenders Association's Veterans Defense Program and a retired United States Navy captain.

In 2009, the Supreme Court decided a landmark case for capital defendants. In *Porter v. McCollum*, 558 U.S. 30 (2009), the Court held that an attorney's failure to investigate a defendant's military background could be sufficient foundation for a claim under the Sixth Amendment for ineffective assistance of counsel. That decision shows that the Court rightly believes

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that a defendant's prior military experience can have real probative value during capital sentencing. Today, there are approximately 300 veterans on death row; this accounts for 10 percent of all individuals currently sentenced to death. Many unique factors may be at play for this population that are not present in other death penalty cases—factors that should be investigated before sentencing in order to allow counsel to paint a complete picture of the history and background of the defendant and present an effective mitigation case. Military history and service, in particular, are critical issues for counsel to examine, because with a history of service comes potential mitigating factors relevant for sentencing, such as traumatic brain injury or posttraumatic stress disorder (PTSD).

This article will more closely examine several of the factors that the Supreme Court, in *McCollum*, believed to be relevant and crucial to investigate for individuals in this population who are facing a death sentence.

POSTTRAUMATIC STRESS DISORDER

Individuals who serve in the military are more likely to be exposed to potentially traumatic events during their service, leading in some cases to the development of PTSD. In order to understand the effects of posttraumatic stress, and the ways that these effects should be investigated before a capital sentencing hearing, it is important to understand the neurobiology of stress, and the ways in which PTSD can present and develop in individuals with military service backgrounds.

The human brain is designed to handle stress as it happens, but there is also a lasting effect that stress can have on our nervous system. Someone who is exposed to stressful events with regularity, like many individuals in the military, are more likely to have these lasting impacts affect not just their neurobiology, but potentially how they interact with the world due to the changes in their brains. PTSD is viewed by clinicians as a pathological fear reaction, based on circuitry in the brain that changes based on exposure to stressful or traumatic events. In some cases, PTSD can develop from an over-learning of trauma memory, through repeated exposure, and a failure of extinction, the process through which new inhibitory memories are created that help the brain dissociate from the repeated traumatic memories. As a result, individuals with PTSD will reexperience heightened states of fear and arousal in stressful situations when they encounter a trigger, because their brains have not developed a way to inhibit the reaction to trauma.

The stress experienced by individuals with PTSD is seen in several areas of the brain, namely the amygdala, hippocampus, and prefrontal cortex. Hyperarousal—a heightened reactionin response to an unrelated trigger event seems to be related to increased activation in the amygdala, which is a part of the brain responsible for mediating fear responses. Additionally, studies involving magnetic resonance imaging (MRI) scans of veterans and abuse survivors with PTSD also showed that the diagnosis is associated with lower hippocampal volume in the brain, meaning the hippocampus is actually smaller in these individuals. The hippocampus is thought to be involved in creating a circuit with the amygdala that allows for spatial learning, or mapping the physical environment, and inhibiting, or lowering, the amygdala's response to stress. This smaller hippocampus can disrupt the process of learning that an unrelated trigger—like a loud noise or sudden movementdoes not pose the same threat as the traumatic event itself, so individuals with PTSD will continue to react with fear or anxiety when confronted with those triggers that remind them of the stressful memory.

PTSD and other psychological issues, such as depression, substance abuse, and anxiety, can stem from any number of situations faced by military personnel, ranging from experiences in combat to dealing with loss of friends and colleagues to negotiating stress due to constant relocation and change. PTSD does not present the same way in any two cases, and generally has individual causes and triggers, which makes it critical that mental health providers understand and treat each case effectively based on those unique circumstances presented by the individual seeking treatment. Statistical research shows that there are over 600,000 different ways PTSD can manifest and lead to diagnosis, because there are such a wide variety of symptoms, both mental and physiological, that meet diagnostic criteria.

Beyond the stress that PTSD can cause, individuals with

this diagnosis are often at a heightened risk for suicide. Recent research shows that, on average, 22 military veterans commit suicide every day. Many of these individuals likely have some type of posttraumatic stress, even if it has not been formally diagnosed.

PTSD is laid out in the *Diagnostic and Statistical Manual* (*DSM*), which states that a diagnosis must be based on several criteria, including a history of exposure to a traumatic event that meets specific stipulations and symptoms from each of four symptom clusters: intrusion, avoidance, negative alterations in cognitions and mood, and alterations in arousal and reactivity. The fifth criterion concerns duration of symptoms; the sixth assesses functioning; and the seventh criterion clarifies symptoms as not attributable to a substance or co-occurring medical condition.

It is important for defense counsel investigating possible PTSD as a mitigating factor to understand the way in which PTSD is evaluated and diagnosed, and the wide variety of symptoms that can lead to this diagnosis. In order to be diagnosed with PTSD, an individual must meet the diagnostic criteria laid out in the DSM: a person must experience a traumatic event, and there must be the presence of "intrusion symptoms," which can range from having intrusive, recurring, involuntary memories, to nightmares, to dissociative reactions. The presence of dissociative states, in particular, may be useful in building a mitigation case for an individual diagnosed with PTSD. An individual may also show "avoidance symptoms," which can be described as meaningful attempts to avoid stressful situations that could trigger the intrusion symptoms. There may be "negative alteration in cognition or mood," which is a negative view of the world, or the self—there may be shame surrounding the symptoms, or guilt about an event that occurred which led to posttraumatic stress. Finally, there may be "physiological reactivity and arousal," which describes the physical manifestations of PTSD, including irritability, aggressiveness, self-destructive or impulsive behavior, hypervigilance, an exaggerated startle response, and problems in concentration or attention. Ultimately, these factors allow for a diagnosis of PTSD and for a way to begin treatment, to change the neurobiology at play when stressful situations, and then their triggers, are encountered.

There is a significant discrepancy between the number of people diagnosed with PTSD and the number of people receiving adequate mental health care for their condition. It is crucial for an attorney to investigate not just whether a formal diagnosis of PTSD has been given, but also whether an individual has exhibited some, but not all, of the symptoms associated with PTSD. Even without a formal diagnosis, psychological stress from military history and the symptoms that have developed because of it can be very compelling in a mitigation case.

In fact, it is very likely that a number of individuals with military service histories are experiencing some, but not all, of the symptoms that lead to a PTSD diagnosis. In a recent assessment out of New York, the RAND Corporation found that out of 700 veterans surveyed, only 16 percent met full diagnostic criteria for PTSD. So, while many veterans may be having intrusive thoughts, or difficulty with impulse control,

based on stressful events they dealt with or witnessed, they would not be given a *DSM* diagnosis. This is critical for attorneys to recognize, because undiagnosed PTSD is still incredibly relevant to a mitigation case.

Additionally, individuals with PTSD can sometimes present as "sensation seeking." This term, while not clinically used in diagnoses, describes someone who presents with increased impulsivity and increased risk-taking behavior, which can lead to the criminal offense at issue. This individual's optimal level of arousal is said to be heightened, possibly as a result of combat or experiences in high-intensity situations. People who present as sensation seeking are trying to repeat the experience of that heightened arousal by engaging in activities that flood their nervous system with the same neurotransmitters that are released during stressful times in combat, for example. Such "adrenaline junkies" are common among veterans.

In the courtroom, attorneys may introduce a diagnosis of PTSD during trial, as the basis for an affirmative defense, or at sentencing, as a mitigating factor to persuade a judge or jury that a life sentence is more appropriate than capital punishment. Frequently, if PTSD is used as part of an affirmative defense, it is done to support an insanity defense. Most often, individuals affected by PTSD who experience dissociative symptoms will invoke the insanity defense. If this is unsuccessful and a defendant must face a capital sentencing hearing, the presence of PTSD can still be used in a mitigation case, to show lessened culpability based on the symptoms that individual presented, and how they influenced the behavior that led to the commission of the crime.

It is critical for attorneys introducing evidence of PTSD into the record to show the causality between the diagnosis, the accompanying symptoms, and the criminal act itself. Often, symptoms such as dissociative reactions, hypervigilance, and emotional or psychological reactivity can be particularly useful to show how an individual's reaction and subsequent criminal act could be causally related to a PTSD diagnosis.

BRAIN INJURY AND NEUROLOGICAL TRAUMA

The topic of brain injuries is an expansive one, as there are myriad ways that the brain can be injured, and the individual effect each injury can have is often unique to the person who has experienced it. However, to generalize, when investigating a defendant's background where there is past military service, there are several more common types of brain injuries and resulting behaviors that attorneys should be able to recognize and investigate.

Brain injuries among military personnel are incredibly common; since 2000, over 327,000 individuals in the military have suffered some type of brain injury. The most common type of injury that veterans experience in combat is from improvised explosive devices (IEDs) and other blast-type explosions. The areas of the brain most often affected are the frontal lobes, and more specifically, the prefrontal cortex, where humans have the majority of their executive function control. The frontal lobes take up a significant portion of the cortex, and injuries to this part of the brain can result in a variety of symptoms; no two brain injuries look the same or present the exact same symptomology. The frontal

lobes are involved in a wide variety of actions, including motor function, problem solving, spontaneity, memory, language, judgment, impulse control, and interpreting social behavior. Damage to the frontal lobes may impact any of these functions, and the exact nature of the injury and the symptoms caused by it can be determined by the severity and location of the brain injury. The frontal lobes also contain the prefrontal cortex, which is responsible for regulating impulses and putting off instant gratification by stopping to think and consider external circumstances and outcomes; thus, it is an especially relevant area to recognize in the context of criminal defense. Damage to the prefrontal cortex can have an incredibly detrimental impact on one's ability to regulate impulses and behave appropriately.

Integrating evidence of brain injury into a capital sentencing case should involve a multipronged approach, using both physical and psychological data obtained by experts. The American Bar Association's (ABA's) Supplementary Guidelines for the Mitigation Function of Defense Teams in Death Penalty Cases, section 4.1, in discussing the mitigation phase of capital cases, specifically says that counsel must compile extensive historical data, as well as obtaining a thorough physical and neurological examination. This can, and should, include diagnostic studies, neuropsychological testing, brain scans, blood tests, and genetic studies, as well as ongoing consultation with mental health specialists.

Through this directive, it seems apparent that the ABA recognizes the importance of neuroscience evidence in a mitigation case where brain injury may be at issue. Further, many claims based on ineffective assistance of counsel under the Strickland test have been successful based on an attorney's failure to appropriately investigate, gather, or understand neuroscience evidence. In one recent article entitled "The Myth of the Double-Edged Sword: An Empirical Study of Neuroscience Evidence in Criminal Cases," Professor Deborah Denno reviewed 800 criminal cases between 1992 and 2012 and any accompanying Strickland claims and neuroscience evidence used. She specifically discusses 366 death penalty cases. Of those, 255 had Strickland claims, primarily with respect to the mitigation phase of the trial for the death penalty. Of those 255, 221 featured at least one claim based on misuse or nonuse of neuroscience evidence, and of those, 67 were sustained. All but one were specifically based on the attorney's mishandling or omission of neuroscience evidence.

In the context of capital punishment, the Supreme Court has also looked to neuroscience evidence to determine the appropriateness of a death sentence. In 2005, the Court held in *Roper v. Simmons*, 543 U.S. 551 (2005), that individuals under age 18 at the time of the offense are not eligible for execution. In finding this, the Court cited an amicus brief from the American Psychological Association that discussed juvenile brain development, specifically how the frontal lobes of human brains are not fully developed by age 18. The Court found this compelling, and reiterated that the death penalty must be reserved for the worst of the worst offenders who commit "the most serious crimes' and whose extreme culpability makes them 'the most deserving of execution."

Ultimately, the Court held that individuals whose brains

were not fully formed at the time they committed a crime were not the "worst of the worst" offenders and should not have the option of a death sentence. Later, the Court also relied on similar neuroscience evidence to extend its line of thinking in *Roper*, and held in *Graham v. Florida*, 560 U.S. 48 (2010), that juveniles could not be given life in prison without parole for nonhomicide offenses. Eventually, that was extended to all offenses in *Miller v. Alabama*, 567 U.S. 460 (2012). This type of mitigating information continues to prove effective for individuals facing death sentences, and provides wider guidance about when it is appropriate to impose a death sentence.

In order to appropriately gather evidence for a mitigation case for an individual with a traumatic brain injury, it is likely that consultation with an expert in mental health and neuropsychological testing will be beneficial. An expert in this area will be able to assess the behaviors at issue and determine the proper types of testing in order to formally document the behavior and the likely root cause—in many cases, the traumatic brain injury.

IMPACT OF MILITARY CULTURE AND REINTEGRATION INTO CIVILIAN LIFE

It is also critical to understand the other factors that can be present in developing a mitigation case for a defendant with a military history. Besides the neuroscience evidence that can show the presence of a traumatic brain injury, or the psychological evaluations that can provide diagnostic confirmation of PTSD, issues surrounding reintegration and military culture can play vital roles in providing context for a defendant's behavior to a jury that likely has very little personal experience with these issues. For example, one significant issue that is frequently seen with individuals leaving military service is that they lack the same type of structure they were used to experiencing while serving. They then must also face reintegrating into civilian life, quite likely with a new job, a changed family and set of friends, and a different perspective that comes with having served. The difficulty of reintegration back into civilian life, combined with the sudden loss of their routine, can prove detrimental.

The influence of military culture is also critically important for defense counsel to take into consideration while conducting a mitigation investigation. There is not a strong emphasis on sensitivity and introspection, and individuals serving in the military can internalize these cultural norms and lose their natural inclinations to do some introspective work if they encounter a traumatic situation. There may also be a culture of aggressiveness or assertiveness in many military units that can be hard to recognize and break away from after an individual's service has ended.

RECOMMENDATIONS FOR DEFENSE COUNSEL

In *McCollum*, the Supreme Court found that defense counsel must investigate a defendant's military background before a sentencing hearing. This is an important first step in recognizing that individuals with a military history may have unique issues at play in death penalty sentencing. Investigation into this history by defense counsel, however,

should not be the only tactic in preparing for these cases. In addition to the criteria laid out in *McCollum*, it may also be valuable to consider more specific jury instructions in capital cases that reference service history.

A sample instruction that a judge could give in order to allow the jury to consider military service and history could read:

In this case, the Defendant has presented evidence of his/her service in the military, [in particular his/her service in combat]. The Defendant has argued that this service is mitigating in your determination of the appropriate sentence in this case. In considering the penalty, you may consider the Defendant's service to our nation and accord leniency in recognition of that service. You may accord leniency to the Defendant on the basis of that service alone or in conjunction with other factors in the Defendant's background, history, or character.

Additionally, defense counsel could request more specific instructions based on the defendant's personal service history. This might include statements such as "The Defendant has argued that at least some of his/her military service has been served in harsh and gruesome conditions. The Defendant has argued that this service in harsh or gruesome conditions is mitigating in your determination of the appropriate sentence in this case." Counsel may also want to specifically refer to a defendant's mental health as a mitigating factor, and could use language such as "The Defendant has argued that during the course or because of his/her military service, he/she suffered stress and/or a mental and/or emotional toll." These types of specific instructions can assist juries in determining more precisely what can be considered mitigating factors.

Going even farther, it may be reasonable to investigate whether a categorical exclusion, like those established for individuals with intellectual disabilities in *Atkins v. Virginia*, 536 U.S. 304 (2002), and for juveniles in *Roper* would be appropriate for military veterans. The rationale in both of those cases dealt with lessened culpability because of compromised mental states; these two groups could never be "the worst of the worst," so they should be automatically excluded from the possibility of capital punishment. It could be reasonable to extend this line of thinking and say that individuals with documented PTSD or documented traumatic brain injuries should also be excluded because of the potential for their lessened culpability. A veteran who chose to serve his or her country and became injured as a result may deserve exclusion based on the injury received in the course of that service.

CONCLUSION

Ultimately, there are myriad issues for defense counsel to consider when they have a client who has a military history. It is important to not only understand the various types of impact this history can have on a client's behavior, stemming from psychological trauma to physiological brain damage, but to also recognize the critical nature of this history as potential mitigating evidence. Attorneys who regularly consult with experts and seek to understand the unique way that military service can impact future civilian life for veterans will be more effective and zealous advocates for this often overlooked population.