

## Author Reply: Vitacco, Erickson, and Lishner: Holding Psychopaths Morally and Criminally Culpable

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### Abstract

Psychopathy is characterized by pronounced emotional deficits, yet individuals with psychopathic traits generally understand the law and the likely punishments for violating it. Vitacco, Erickson, and Lishner (2013) suggest that because of this appreciation, there is no question that psychopaths are criminally responsible. We make the modest argument that increasing psychological and neurological evidence calls into question whether conventional assumptions about an offender's culpable states of mind hold true for psychopaths. It is likely, we suggest, that a wide range of deficits found in psychopaths impair their ability to calculate risks of harm and utilize information about the consequences of their behavior.

### Keywords

neuroscience, psychopathy, punishment, responsibility

We agree with the argument advanced by Vitacco, Erickson, and Lishner (2013) that psychopathic individuals broadly understand the law and have reasonable knowledge of the consequences imposed by law. Psychopaths largely do not want to be punished, and will do what they can to avoid it. Despite their appreciation of the law, some psychopathic individuals continue to violate it. They often commit crimes in which the likelihood of being caught is high, and recidivate despite being previously incarcerated. This failure to behave does not stem from deficits in knowledge about the law or knowledge about the potential consequences. Rather, evidence suggests that psychopaths have deficits that compromise their decision-making abilities during the time preceding the criminal act. In addition to deficits in empathy, which leave psychopaths without one of the primary reasons that motivate most individuals to behave

morally, psychopaths also have deficits in processing information about punishment, and properly guiding their behavior in response to cues in the environment. These decision-making deficits are failures of risk calculations that the cognitive requirements of the criminal law assume. Our argument, therefore, is modest and yet challenging: What should be done with emerging evidence that some people may lack the capacity for the kind of decision making and rationality that the criminal law presupposes? We wonder whether there is sufficient evidence that these neurological deficits impair the ability of psychopaths to appreciate the wrongfulness of their actions *at the time of the criminal act*, and also impair their capacity to conform their conduct to the requirements of the law.

Psychopaths are insensitive to cues that *signal* impending punishment. It is not the case that they are insensitive to punishment itself—in laboratory studies, psychopaths are no less sensitive than nonpsychopaths to the receipt of an electric shock (Hare, 1965), exposure to a noxious odor (Flor, Birbaumer, Hermann, Ziegler, & Patrick, 2002), receipt of painful pressure (Birbaumer et al., 2005), or loss of money (Newman & Kosson, 1986) when these stimuli are presented in isolation and are the focus of attention. Their deficit appears to occur in the *anticipation* of punishment. Studies find that psychopaths are insensitive to cues that an aversive event will occur; when an aversive event such as an electric shock or foul odor is repeatedly paired with a cue such as a specific picture or an auditory tone, psychopaths do not learn to respond to the cue (Flor et al., 2002). Even when individuals are explicitly told that an aversive event will occur after a particular cue, psychopaths still fail to respond to the cue (Hare, 1965). This deficit in the face of cognitive awareness has been observed via physiological recordings (Flor et al., 2002; Hare & Quinn, 1971), brain imaging (Birbaumer et al., 2005), and explicit

self-reports. After repeated pairings between the cue and the aversive stimulus, psychopaths continue to underestimate the occurrence of the aversive stimulus following the cue and overestimate the occurrence of the aversive stimulus after other events (Flor et al., 2002). Based on these findings, we suggest that although psychopaths likely have a normal aversion to incarceration, when considering committing a crime, the threat of punishment is likely less salient because of their impaired ability to calculate risks. This impairment, we suggest, is also reflected in their appreciation of the wrongfulness of their actions, and their sensitivity to the cues that should motivate them to conform their conduct to the requirements of the law.

In addition to deficits in anticipating punishment, psychopaths exhibit deficits in the ability to *avoid* punishment when it is not their primary focus. A classic study by Newman and Kosson (1986) found that in a laboratory task involving monetary gain and loss, psychopathic individuals were able to successfully avoid monetary punishment if that was the primary goal of the task. However, if the task simultaneously involved a goal of earning rewards, psychopaths performed poorly. It was suggested that when their primary goal is to earn reward, psychopaths are unable to reallocate their attention to cues of potential punishment. We can assume that psychopaths were motivated to earn as much money as possible when participating in this study, and that poor performance is a result of true impairments in modifying their behavior based on environmental cues. Particularly in the pursuit of a reward (e.g., money), psychopaths will be less sensitive to cues of potential punishment or other bad outcomes such as physical injury. The result of these combined deficits is that psychopathic individuals, at times, do not approximate the risks of harm to others and the risks of punishment to themselves in ways that are assumed with rational offenders.

Another point raised by Vitacco et al. (2013) is that simply demonstrating brain abnormalities does not address the question of responsibility. We acknowledge that brain imaging evidence is not *necessary* for making nonresponsibility claims. We believe, however, that such abnormalities may be relevant to understanding the nature of the psychopaths' deficits. Significant differences in brain structure provide some

indication that brain functioning is chronically altered, and that psychopaths lack the full capacity for weighing the relative risks of their decision-making. Functional brain imaging studies, particularly those examining responses to moral content, support the idea that the brain abnormalities affect moral judgment. Although these deficits are physically not as pronounced as those observed in patients with brain injuries, they occur in regions that, when damaged, appear to significantly affect moral reasoning.

Of course, the challenge lies in determining the criteria for abnormality, and we agree with Vitacco and his colleagues (2013) that extant research has yet to specify the degree that would be sufficient to make a nonresponsibility claim. Our position, though, is far more modest. As evidence mounts that psychopaths lack the ability to perform the kinds of risk calculations associated with certain "culpable states of mind," legal scholars and neuroscientists must begin discussing how the criminal law might have to accommodate advances in the neurosciences. We have enshrined cognitive and volitional parts of the criminal law founded on many assumptions about an offender's cognition. This results in a host of folk attributions that are necessary for criminal liability. Emerging research should make us less than entirely comfortable taking both for granted.

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