An Excerpt from "The Prefrontal Cortex and the Criminal Justice System" by Kelsie McWilliams

When it comes to issue of punishment, justice, and rehabilitation for criminals, the pre-frontal cortex is of instrumental value. Damage sustained to the pre-frontal cortex has been proven to alter an individual's personality and behavior. Consequently, those who exhibit antisocial or sociopathic behavior but have no clear or verified record of pre-frontal cortex damage are often the most puzzling cases. Thus, when assessing an individual's liability for crimes he or she has committed, it is crucial to differentiate between an individual's understanding of right vs. wrong and ability to control deviant behavior.

A low functioning pre-frontal cortex indicates that an individual knows the moral decision to make but chooses not to control his or her immoral desires. According to Salposky (2004), sociopaths must activate more of the pre-frontal cortex than control individuals in order to achieve comparable efficacy, as demonstrated by neuropsychological testing. In other words, when sociopathic individuals do attempt to regulate their behavior, their pre-frontal cortex is naturally less effective. Congruently, Salposky shows that those with a smaller volume of the pre-frontal cortex are more naturally inclined to engage in aggressive and violent behavior. Therefore, because this individual knows the difference between right and wrong, the justice system will hold this person responsible for any crimes he or she has committed. However, the justice system does not take into account an individual's limited executive function and ability to regulate behavior. This ultimately calls into question the justice system's criteria for guilt being dependent on one's ability to understand the difference between right and wrong. Instead, verdicts could arguably be considered more just if they weighed an individual's ability to control immoral behavior more heavily.

Although sociopaths may exhibit a biological predisposition for aggression and difficulty regulating behavior, these individuals are still expected to be functioning members of society who do not infringe on the rights of others. However, the justice system could benefit from treating sociopaths differently than those with fully functioning pre-frontal cortexes when making decisions regarding punishment and rehabilitation. While complete rehabilitation is not necessarily likely or even realistic, some rehabilitation is possible. By working to rehabilitate sociopaths through better regulation of behavior, whether it be through additional testing, behavioral exercises, or some other consistent form of therapy, the legal system may be able to tread uncharted territory and ultimately decrease the likelihood of sociopathic criminal behavior. To simply prescribe the same punishment for all individuals guilty of a crime, regardless of impairment in prefrontal cortex functioning, is to negate the fact that sociopaths exhibit atypical neurological functions. Such a negation suggests that the application of punishment is indiscriminate thereby calling presumptions of fairness and morality in the justice system into question.

References:

Salposky, R.M. (2004). The frontal cortex and the criminal justice system. *Philosophical Transactions: Biological Sciences*, *359*(1451), 1787-1796.