# Psychopaths and Superheroes





The sight of someone who is frightened elicits caring responses from those who see it.



### PSYCHOPATHY sometimes considered synonymous with sociopathy, is traditionally a personality disorder characterized by persistent antisocial behavior, impaired empathy and remorse, and bold, disinhibited, and egotistical traits.



#### DORSOLATERAL PREFRONTAL CORTEX

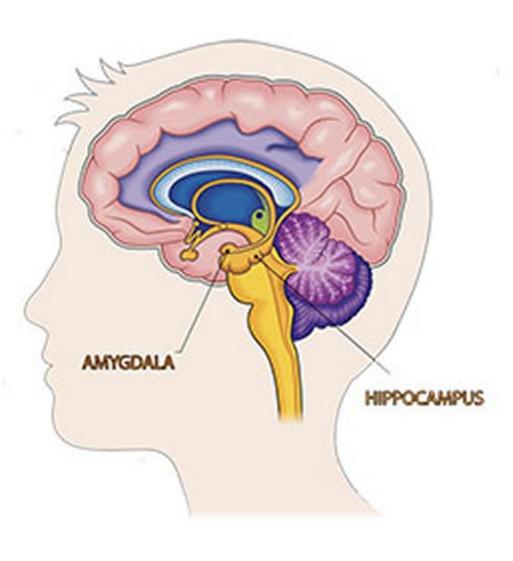
ORBITOFRONTAL PREFRONTAL CORTEX 🖊

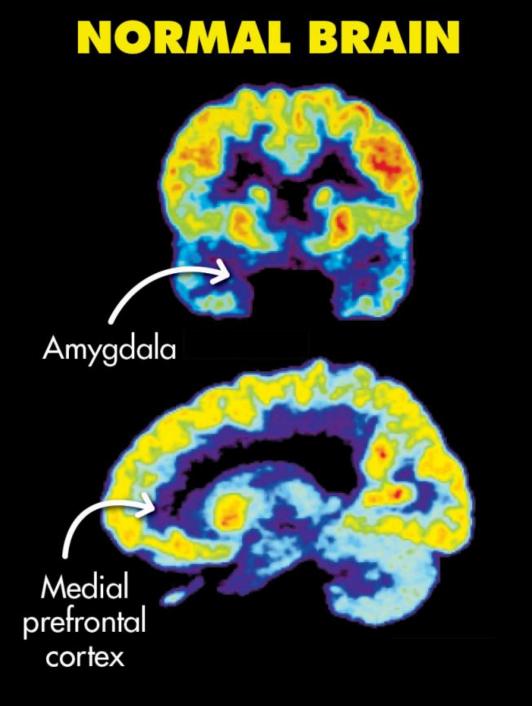
VENTROMEDIAL PREFRONTAL CORTEX <

psychopaths have reduced connections between the ventromedial prefrontal cortex (VmPFC), the part of the brain responsible for sentiments such as empathy and guilt, and the amygdala, which mediates fear and anxiety

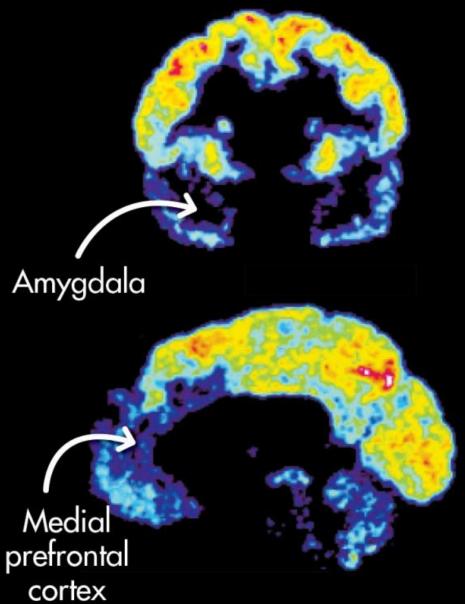
In psychopaths, the researchers observed deformations in a part of the brain called the amygdala, with the psychopaths showing a thinning of the outer layer of that region called the cortex and, on average, an 18-percent volume reduction in this part of brain.

"The amygdala is the seat of emotion. Psychopaths lack emotion. They lack empathy, remorse, guilt,"





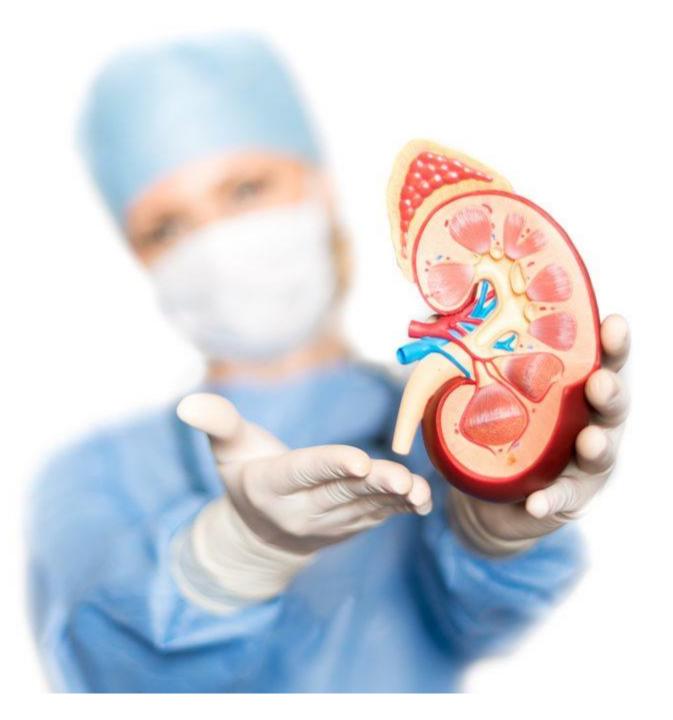
#### **PSYCHOPATH BRAIN**



## 600 nm 400 nm 500 nm 700 nm Psychopathy is a spectrum.

This suggests that there must be such a. thing as an anti-psychopath.





## Altruism

the belief in or practice of disinterested and selfless concern for the well-being of others.

behavior of an animal that benefits another at its own expense.









Evidence shows that helping others can have a positive effect on your own mental health and wellbeing.





