

Inside The Criminal Mind: Brain Scans Of Serial Killers Show Low Orbital Cortex Activity, High Psychopathic Tendencies

Feb 24, 2016 05:55 PM By [Lizette Borreli](#) @lizcelineb | l.borreli@medicaldaily.com

The infographic features a portrait of Jim Fallon on the left, a central image of a human brain, and a right-side image of a brain scan with red highlights. Text elements include: 'Jim Fallon, Neuroscientist', 'Jim has studied the brains of psychopaths for over 20 years', 'Fallon recently discovered he has a whole lineage of murderers in his ancestry', 'He scanned his own brain as well as his son's and compared them to brain scans of psychopaths.', 'Results showed that he had the same low orbital cortex activity as a serial killer.', and 'The orbital cortex is the area that is believed to be involved with ethical behavior, moral decision making, and impulse control'.

Genetics, brain patterns, and childhood traumas all help make up the brain of a serial killer. [Best Counseling Degrees](#)

Television shows like "Dexter" and "The Following" have given us a terrifying glimpse into the criminal mind of [serial killers](#). We often catch ourselves asking, "Why do they kill?" "How do they pick their victims?" and "Why can't they control their impulse to kill?" To answer these questions, [Best Counseling Degrees](#) has developed "The Brain of A Serial Killer" [infographic](#) to explore the genetics, brain patterns, and childhood traumas that make up this profile.

Dr. Helen Morrison, a Chicago-based forensic psychiatrist, has studied and interviewed 135 serial killers. She has found shocking similarities, and believes a chromosome abnormality is a likely trigger. This chromosome abnormality begins to show itself during puberty, especially in men who display their homicidal tendencies. [Brain scans](#) show they never develop a sense of attachment and belonging to the world, meaning they don't empathize with their victims, which allows them to kill them.

Neuroscientist Jim Fallon has studied the [brains of psychopaths](#) for over 20 years, and stumbled upon a shocking discovery in his research — he has the same low orbital cortex activity as a serial killer. This is the area that is believed to be involved with ethical behavior, more decision making, and impulse control. Low activity in this region means there's less normal suppression of behaviors, including rage, violence, eating, sex, and drinking.

"People with low orbital cortex activity are either free-wheeling types or sociopaths," Fallon said.

When it comes to childhood, serial killers are more likely to have experienced child abuse than society in general. In a study of 50 serial killers, researchers found about 70 percent experience some maltreatment and 50 percent go through psychological abuse growing up. Fallon's research has led him to believe childhood experience could make all the difference when it comes to the making of a serial killer.

Overall, the profile of a serial killer is a person who murders three or more people in at least three separate events with a cooling period between hits. They generally kill during a cycle when they're feeling stress, and feel temporarily relieved after they commit the homicide. The motivations of serial killers vary, but they often fall into these four categories: Obtaining money, experiencing the thrill, a sense of power, and a desire to rid the world of evildoers.

View the infographic below to learn more about the making of a serial killer and the prevalence of homicides around the world.

<https://infogram.com/a-serial-andnbspkillers-brain-vs-a-normal-brain-1go502yex816mjd>

A SERIAL KILLER'S BRAIN VS. A NORMAL BRAIN

"I didn't want to hurt them, I only wanted to kill them."
-David Berkowitz

- 90%** Percentage of serial killers that are men.
- 10%** Percentage of serial killers that are women.
- 35%** Percentage of victims who are males.
- 65%** Percentage of victims who are females.

WHAT IS A SERIAL KILLER?

A serial killer is someone who murders three or more people in at least three separate events. Serial killers also tend to have a "cooling off" period in between murders.

WHY DO THEY DO IT?

- 1) To get rid of the "evil" in the world
- 2) Because of the thrill
- 3) A sense of power
- 4) Obtaining money

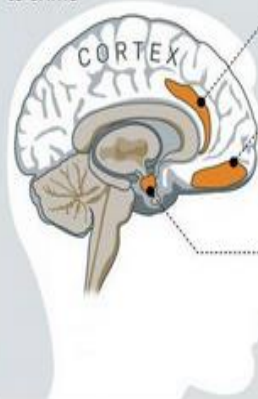
WHEN DO THEY DO IT?

Serial killers often kill in a time of stress, thus helping them relieve it. When they finish the murder they feel relieved and do not "hunt" again until their stress resurfaces.

THE MINDSET OF A CRIMINAL

The criminal mind

Abnormalities in brain structure and function could turn people to crime



Anterior cingulate

Criminals with low activity have higher risk of reoffending

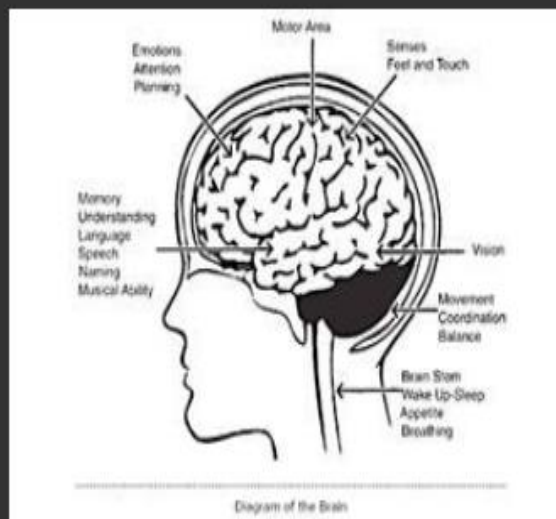
Ventromedial prefrontal cortex

Up to 11% smaller and less active in habitual offenders

Amygdala

Shrunk and less active in teenagers with aggressive conduct disorders

THE MINDSET OF A NORMAL PERSON



10 MOST COMMON TRAITS OF A SERIAL KILLER

- 1) Alcohol/Substance Abuse- According to the FBI's statistics, the childhood homes of more than 70% of serial killers experienced problems related to substance abuse.
- 2) Psychological Abuse During Childhood- According to the interviews and discussions that have been held with known serial killers, emotional abuse and neglect has been the form of abuse most of them (50%) suffered.
- 3) Sexually Stressful Events In Childhood- Research material tells us violent sexual events during childhood have serious affects on an individual's development. The witnessing of violent sexual acts between family members and/or parents had some of the most damaging effects on a child's life.
- 4) Bed-Wetting- Researches argue that persistent bed-wetting past the age of five is demeaning for a child, especially if parents or other figures of authority tease them about it. The child may then act out against animals or use arson to channel their anger and frustration. Over 57% of serial killers were bed-wetters until an unusually advanced age.
- 5) Growing Up Lonely and Isolated- Family members of future serial killers are usually out of step and at odds with each other. Their relationships are malfunctioning and debilitating. These families also have a tendency to move around a lot, and the children are normally removed into shelters before they can turn 18.

