

Psychological and Biological Theories of Crime



Part 1: Biological Explanations of Offending: Old and New

Phrenology

Atavistic qualities

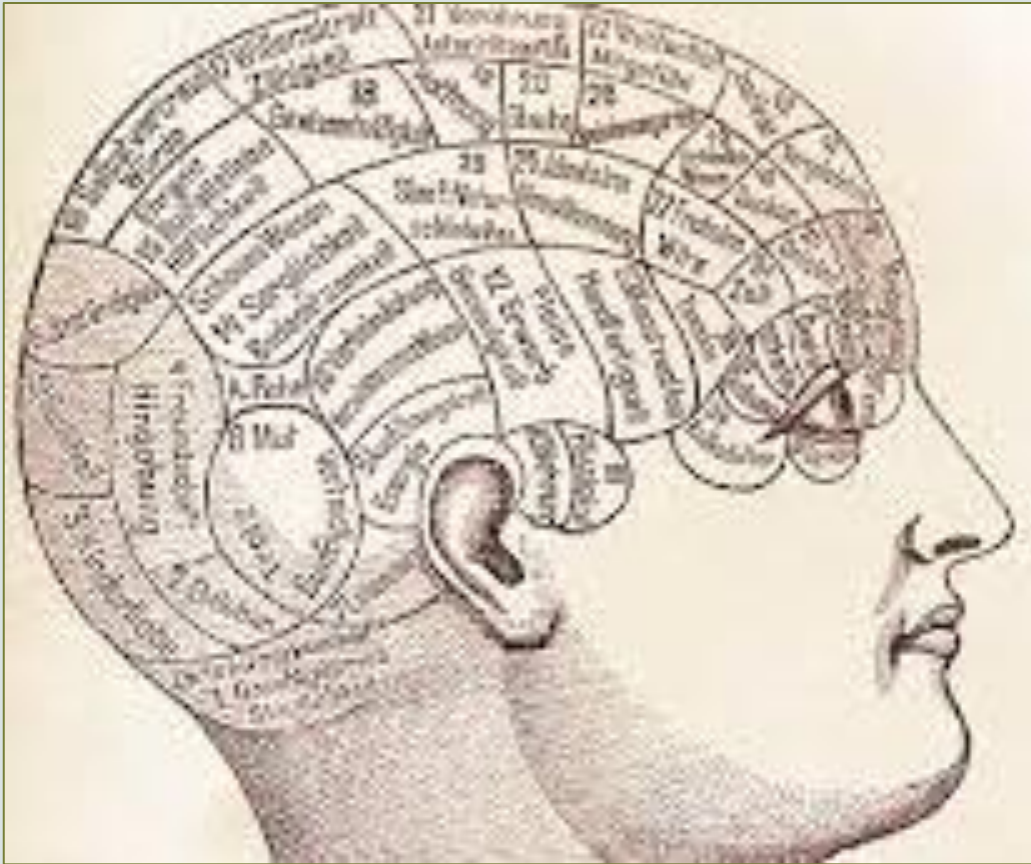
Somatotype
explanation

Genetics

Neuroanatomical
explanations

Neurochemical
explanations

Franz Gall (1800) - Phrenology



- The size and shape of your head effects your brain growth.
- The shape of your head therefore determines your mental abilities.
- This is innate and therefore fixed.

Phrenology

- Attempts were made to legitimize phrenology by using it in America's courtrooms. In 1927 phrenologist, Dr. Edgar Beall was called in to perform a reading on Ruth Snyder, accused of murdering her husband.
- Dr. Beall decided that Snyder's chin "tapered like the lower face of a cat" which proved her "treachery" and "ingratitude." Her mouth was as "cold and hard and unsympathetic as a crack in a dried lemon." Beall's final analysis, after studying Ruth Snyder's face, was that she had "the character of a shallow brained pleasure seeker...murderous passion and lust."
- These descriptions were printed in newspapers of the time and treated as fact.



Cesare Lombroso (1876)

- The criminal is a separate species, a species that is between modern and primitive humans.
- The physical shape of the head and face determined the "born criminal".
- He professed that criminals could be identified by a series of distinguishing physical characteristics such as :

Asymmetrical face

Unusually large or small ears

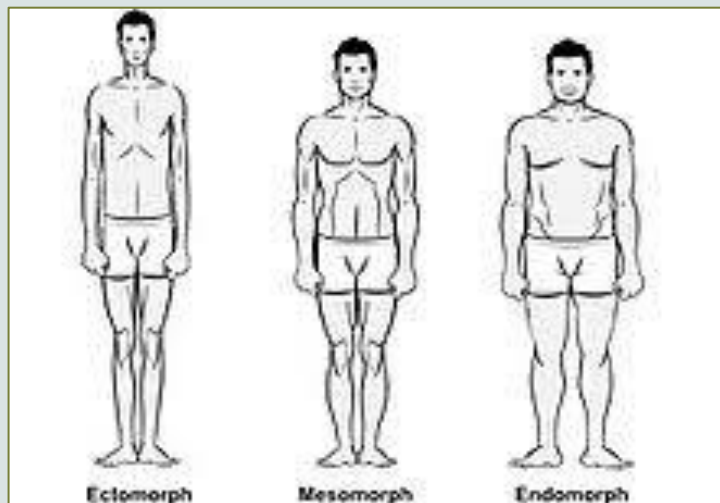
A low receding forehead

Prominent eyebrows, jawbones or cheekbones

- Goring (1972) compared 3000 convicts with 3000 others and found no difference in features
- **He was however considered: `The Father of Criminology`**

William Sheldon (1949) The Varieties of Delinquent Youth

- **There is a strong correlation between body morphology (shape) and criminal behaviour in teenagers**
- **Convicts were most likely to be mesomorphic, and least likely to be ectomorphic**



- The body types are associated with specific traits:
- **Ectomorph**-(thin and fragile), Solitary, Restrained and Self-conscious.
- **Endomorph**-(fat and soft),Relaxed and pleasure loving; Enjoy food and others company.
- **Mesomorph**- (muscular and hard),Aggressive, High pain tolerance; Callous and uncaring.

Evidence for Sheldon?

- Sheldon rated 200 students and 200 criminals and found:
- An equal representation of all types in students,
- More mesomorphs in delinquents,
- More mesomorphs in criminal delinquents.

- Sheldon's constitutional psychology is no longer taken seriously
- But there is a small association between bodily build and criminality.
- How could this be explained?

Genetic Explanations for Criminality

- **The role of genes:**
 - Does crime run in families? If so, is that because of genes or upbringing?
 - As you know, to explore the contribution of genetics, researchers have used twin studies.
 - Genes hold the traits to build and maintain their cells and pass genetic heredity to offspring. BUT...
 - Just how much of our behaviour is determined by our genes?
 - Children are born with a range of genetic makeup predispositions and temperaments.
- The increasing development of sophisticated technologies has shown that the adolescent brain keeps developing into the twenties (Beckman 2004).
 - But also, we know that it is not simply biology, but a lack of **contact, stimulation and social responsiveness** that can alter the developmental path considerably (Dahlberg & Potter 2001).
 - And temperament is crucial for three areas-
 - **Emotional expression,**
 - **Motor activity and**
 - **Sensitivity to stimulation.**

A Criminal Gene?

- Theilgaard (1984) looked for a 'criminal gene'. He studied blood samples of over 30,000 men born in the 1940s.
- Found two chromosome abnormalities – XXY chromosome pattern and XYY chromosome pattern.
- Found that XYY males had slightly lower levels of intelligence than average and tended to be more aggressive towards people than 'normal' men.

- Similarly, Jacobs et al., (1965) suggested that men with the XYY syndrome were more aggressive than normal 'XY' men.
- XYY men are over-represented in the prison population. There are 15 sufferers per 1,000 in prisons and 1 per 1000 in the general population.
- BUT...XYY males not actually as predicted (Graham et al., 2007):

'Normal' aggression and testosterone levels

Prone to developmental disorders and learning difficulties

XYY males are rare in the general population but over-represented in the offender population - why?

Twin Studies as Explanations for Criminality

- Christiansen (1977) studied 3586 sets of Danish twins.

- Concordance rates:

MZ male twins = 35%

DZ male twins = 13%

MZ female twins = 21%

DZ female twins = 8%

- MISTRA-The Minnesota Study of Twins Reared Apart (Bouchard et al., 1979-1990).
- They reported that at least 70% of the variance in IQ was due to genetics.
- Although this study did not specifically look at criminality, it has enormous implications...

How exactly do genes influence our behaviour?

- Genes influence our behaviour **via the amino acids** for which they **code**, which in turn **leads to behavioural responses to the environment** (both **internally and externally**).
- Behaviours are usually polygenic and **genes** are often **pleiotropic** (Plomin 1990; one gene influences two or more seemingly unrelated phenotypic traits).
- However, there are specific genes associated with certain traits.

Contemporary twin studies demonstrate-

- Hyperactivity in boys and girls aged 8-16 has heritability of .70 (Silberg et al., 1996).
- For Conduct disorder similar results (Maes et al., 2007).
- For ADHD it is .76 (Faraone et al., 2005).
- For aggression it is .65 (Burt 2009).
- And for self-control it is .64 (Beaver et al., 2010).

Family Studies

- **Size of family:**
- Larger families - less attention. Also younger siblings model their behaviour on that of older siblings - the 'contagion effect'.
- **Interactions within the family:**
- Correlation between crime and poor interaction within the family.
- Parental conflict, poor use of language and communication, mistrust of other family members.
- Lack of parental supervision is associated with inconsistent punishment. Harsh punishment is effective in the short term, but in the long run can lead to violent delinquency (Straus, 1991).

- **Child rearing practice** (Offman, 1984) found that 'power assertion' style of child rearing was associated strongly with delinquency.
- **Physical punishment** encourages the child to consider aggression as acceptable, given that an authority figure uses it.
- **Inconsistent punishment** has a profound effect on criminal behaviour. Coopersmith (1968) found that inconsistent punishment was linked to very low self-esteem and delinquent behaviour.



Adoption Studies

- Bohman (1982) found that when biological father was alcoholic so was son and often involved in violent crime (Supports previous study opposite) .
- Criminality of sons and non-alcoholics also correlated, but for smaller/petty crimes.
- So, are criminal tendencies inherited?
- Stot (1982) argues that you cannot ignore **prenatal influences** and **socioeconomic** status, in turn linking with stress.

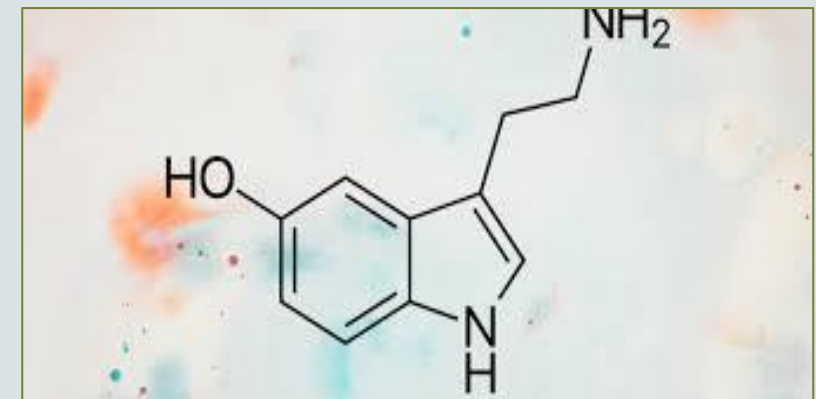
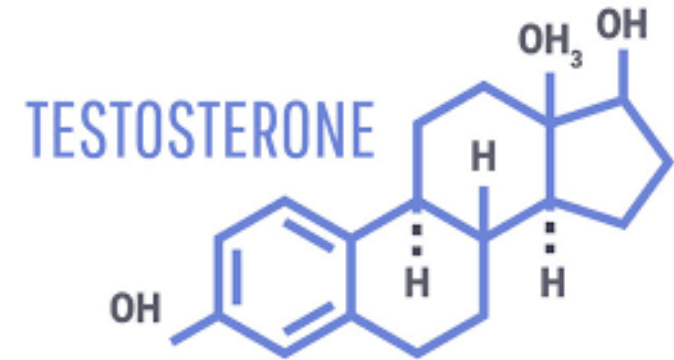
- **Hutchins & Mednick (1975)**
- If both biological and adoptive father had criminal record, 36.2% of sons had a criminal record
- If only the biological father had a criminal record, 21.4% of sons had a criminal record
- If only the adoptive father had a criminal record, 11.5% of sons had a criminal record
- If neither father had a criminal record, 10.5% of sons had a criminal record.
- This clearly shows the importance of environmental factors, in combination with genetic factors, in determining behaviour.
- However, children are placed in an environment similar to the one from which they were adopted. Some children are adopted years after birth, raising the possibility that early experience with the birth-family may have contributed to later behaviour.

Genes Criminality and Free Will

- The debate regarding criminality and free will is a fundamental part of the explanation of causality of criminal activity.
- It is inherently linked to responsibility and legal sanction.
- This notion of `free will` must consider the individual's ability to choose from an endless array of life options (Carson et al., 2007).
- That offenders exhibit a **rational cost-benefit analysis** before making their decision to engage in crime is often a problematic notion which does **not acknowledge** the role of **biological and environmental factors** in shaping their decisions (McGuire, 2004).
- However, an individual is not a passive reflection of external influences and biological influences; we must also consider their personal constructs by which they interpret, predict and control their world.
- It is these constructs that largely guide our behaviour.

Neurotransmitters and Hormones

- **Low levels of serotonin** have been linked to **antisocial** and impulsive behaviour.
- Men generally have lower levels of serotonin.
- James Dabbs (2001) demonstrated that **violent** criminals have **higher testosterone** levels than non-aggressive criminals.
- However, all of these are **correlational** studies and do not show cause and effect.
- Are these chemical imbalances **genetic** or the result of **environmental** factors?



Evidence?

- Animal studies show that by giving MAOI's or SSRI's to increase the amount of **5-HT** (serotonin) available will **reduce** aggression (Nelson & Trainor 2007).
- Eisenberger (2007) found all of the aggressive males in one family had a **MAO deficiency**.
- Also, there are reported **reduced** levels of 5-HT in victims of violent suicides.
- Furthermore, **low levels of dopamine** in the FC have been linked to **poor self-regulation** and faulty **executive** functioning.

- Animal studies show that castrated rats will only become aggressive when given testosterone if they were previously aggressive before castration.

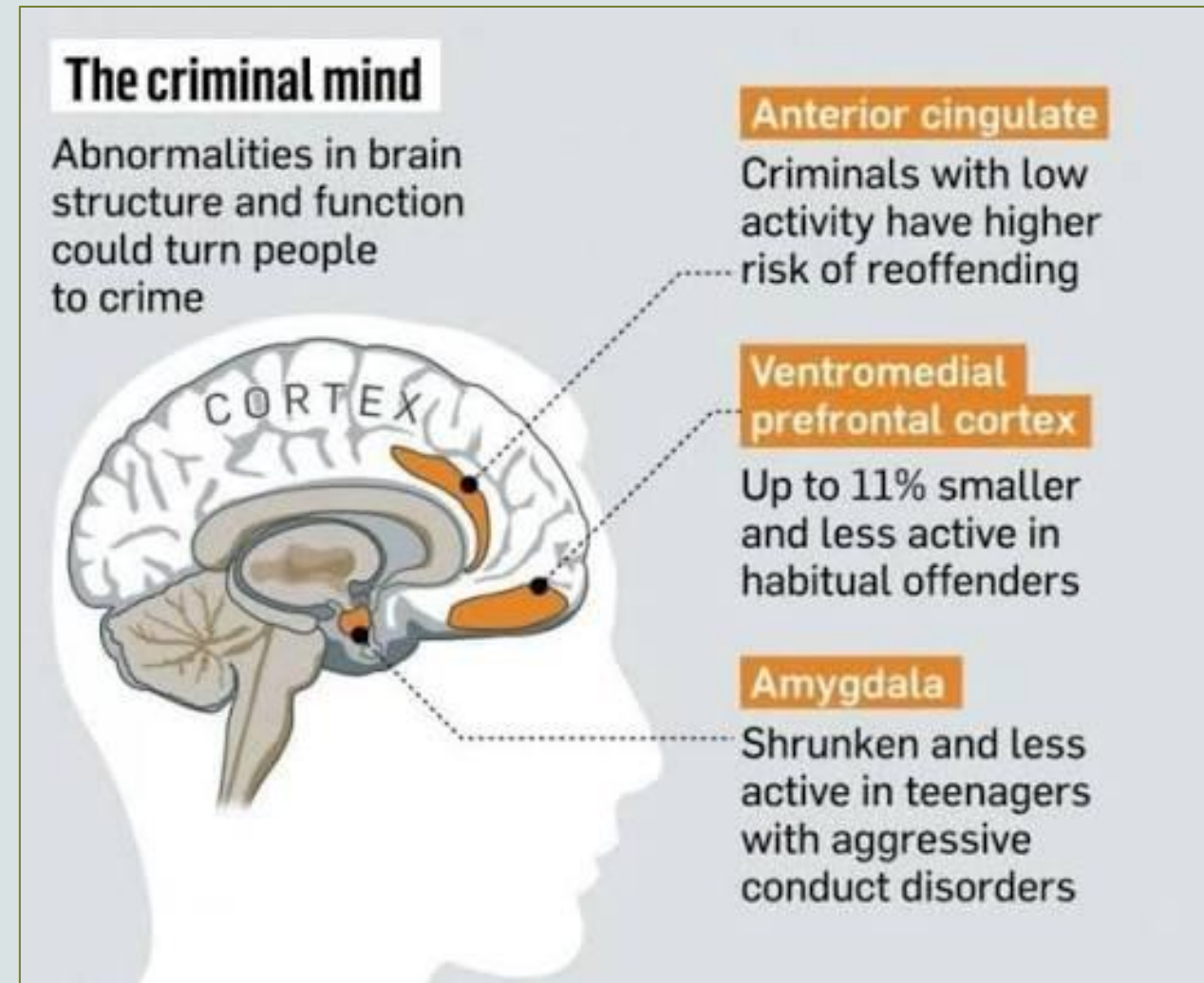
- **What does this imply?**



Testosterone does not directly "cause" or manufacture aggression from scratch in a passive animal; it reactivates or amplifies established behavioural patterns.

The Frontal Brain Hypothesis

- **Remember - emotions are in the limbic system, decision making is in the frontal lobe.**
- **It is the interaction between these two parts of the brain that may help us gain insight into criminal behaviour.**
- Blair et al. (1999) Looked at the brains of convicted psychopaths and **PET** scans revealed **impairment of the pathways between the amygdala and the frontal lobe**, which makes it difficult for the individual to moderate emotional reactions.
- This will affect how the individual will interact with others. Social relationships are difficult, he/she never appropriately develop empathy or guilt, and thus acts more impulsively, without regard for consequences.



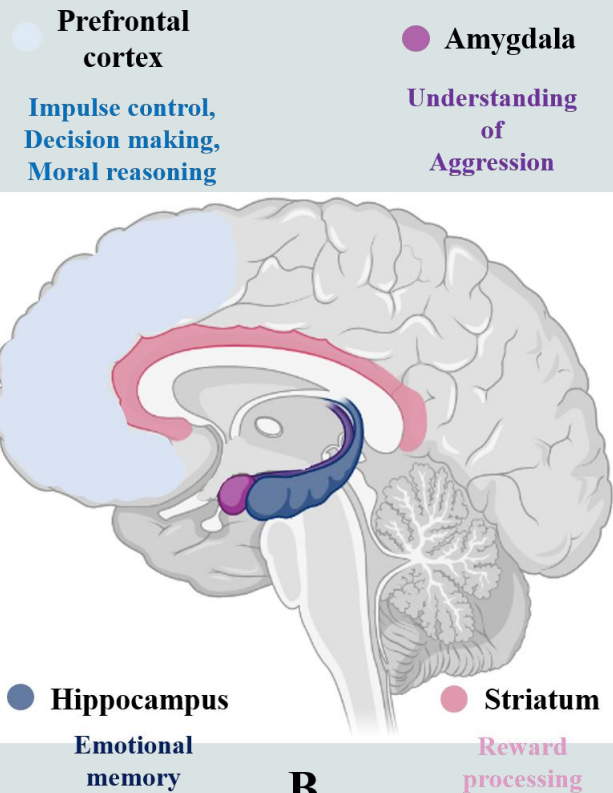
The Frontal Brain Hypothesis and Neuroimaging

Criminal activities

- Psychopathic traits
- Murder
- Violent offending
- Pedophilia
- Sexual offences
- Antisocial personality disorder

A.

Brain regions involved



B.

Neuroimaging Modalities

MRI

Volumetric reductions in PFC gray matter, Hippocampus,

MRS

Low NAA/Cr ratio, Abnormal phosphate metabolism

DTI

Alteration in fractional anisotropy, White matter abnormalities

Neuropsychological Examination

Impairment of tasks assessing Higher Order executive function

C.

MRI - Magnetic Resonance Imaging: 3D structural pictures.

MRS - Magnetic Resonance Spectroscopy: measures chemical and metabolic changes (metabolites) such as NAA, Creatine, Choline, Lactate, and Lipids. I.e. indicators of healthy/unhealthy brain tissue activity (produces line graphs).

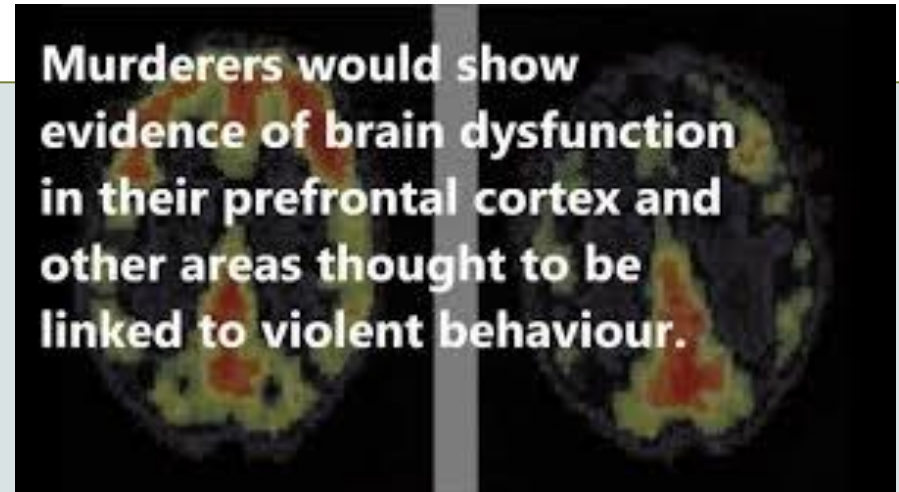
DTI - Diffusion Tensor Imaging: maps the microscopic movement of water molecules along the brain's white matter tracts to explore neural integrity (produces colourful maps).

The Frontal Brain Hypothesis

- A malfunctioning relationship between the PFC and limbic system may cause criminal behaviour?
- As well as studying convicted offenders, research has been carried out on patients with brain damage.
- Damasio looked at the effect of brain trauma in children on later development.
- A 3-month-old infant who had a tumour removed from the frontal cortex, by the age of 9 was demonstrating behavioural problems in school.
- He was socially isolated and inattentive. His free time was spent alone in front of the TV. At times he would lose control of his emotions and physically threaten others.

- **Raine (1994 onwards)**
- Using PET neuroimaging 41 Pp`s completed a cognitive task which involved sustained attention.
- This involved watching a screen for 32 minutes and responding every time a `0` appeared.
- Result: The impulsive killers missed many of the `0`s.
- Damage was also found in the pre-frontal cortex, which controls impulsive behaviour.

Murderers would show evidence of brain dysfunction in their prefrontal cortex and other areas thought to be linked to violent behaviour.

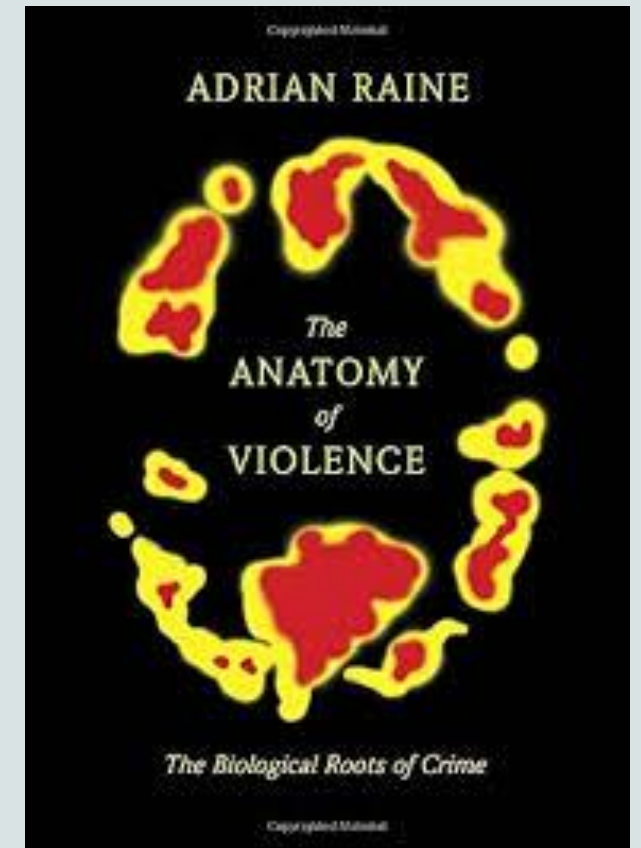
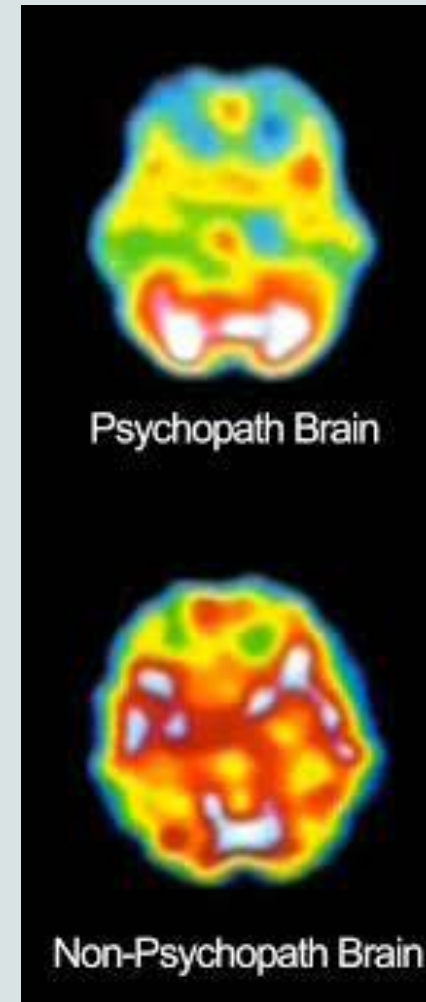


Evidence

More recently
(2026):

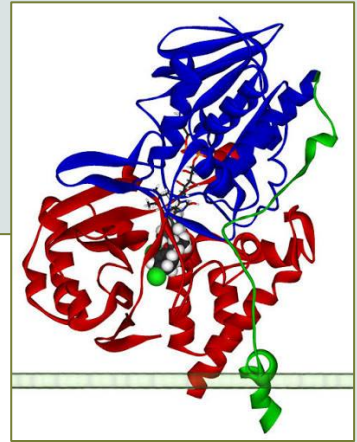
[Reduced amygdala and lateral orbitofrontal volumes in pre-trial murderers: The role of psychopathy - ScienceDirect](#)

- Raine believes that sudden, unpremeditated murder could have a biological cause - **abnormality in brain's metabolism.**
- **Low physiological** arousal might mean an individual seeks 'thrills' in increasing measures = criminal behaviour.
- The PET scan studies revealed that a **less active forebrain** and corpus callosum (executive control) will **fail to put the 'brakes'** on for potential criminal behaviour.
- This may be **coupled with low amygdala** activity which can also equal criminal tendencies i.e. lack of fear = likely criminal behaviour.
- Yeudall (1982) in a study of 2000 offenders (post-mortem), found that 90% had some damage to frontal or temporal regions.



The MAOA Gene :

The MAOA Gene Explained | Behavioural Genetics & Psychology



- The *MAOA* gene provides instructions for making monoamine oxidase A. This enzyme is part of a family that break down molecules called monoamines through a chemical reaction known as oxidation. Among these monoamines are the neurotransmitters serotonin, epinephrine, norepinephrine, and dopamine.
- It is located on the X chromosome, meaning that females have two copies of the gene, whereas males only have one.
- In females, these genes can be homozygous or heterozygous, i.e. low-low activity, high-high activity, or low-high activity, respectively.
- Males only have one, and some researchers have suggested that having a low-activity MAOA gene can be associated with aggression and criminality.
- The discovery of the MAOA gene emerged from a study of a Dutch family with a history of violent behaviour, revealing a defect in their MAOA enzyme production.
- Although some studies, particularly in prison populations, have found links between low MAOA levels and violence, findings indicate that not all individuals with the "warrior gene" engage in aggressive behaviour.
- **Monoamine oxidase A gene (MAOA) predicts behavioral aggression following provocation**
- <https://doi.org/10.1073/pnas.0808376106>

The Role of MAOA

- A relationship between the enzyme monoamine oxidase A (MAOA) and antisocial behaviour provides some convincing evidence (Carson et al., 2007) of a **biological basis for aggression**.
- A New Zealand longitudinal study found children who had **low MAOA activity** and a history of **severe child maltreatment** exhibited significant **increases in antisocial** behaviour (Carson et al., 2007).
- In contrast, children with the same **histories of maltreatment** but who had **high MAOA activity** did **not** exhibit increased levels of antisocial behaviour (Caspi et al., 2007).
- Does this imply that some people are born with nervous system characteristics that affect their ability to conform to social expectations and rules?

[A Killer's Genes | Are You Good or Evil? | Horizon | BBC Studios \(youtube.com\)](#)



- [**An excellent article from 2024**](#)
- [The-Tale-of-Warrior-Gene-The-MAOA-upstream-Variable-Number-Tandem-Repeat-MAOA-uVNTR-Polymorphism-and-Its-Role-in-Shaping-Aggressive-and-Violent-Behaviour.pdf](#)

Points to remember

Plomin (1990,1994) has argued that genetics alone cannot explain adult behaviour and we should focus on the way genes interact with the environment.

He suggests that the environment cannot be taken as a constant and that the 'nonshared environment' is a crucial factor in determining adult outcomes for children in the same family.

I.e. what most affects children are the things they do not share with their siblings, their own unique individual experiences.

Parents think they raise their children in the same way, but families alter over time, sometimes quite significantly, e.g. chronic illness, unemployment, high mobility, divorce, etc.

Children's experiences vary too, e.g. having an influential teacher, developing a new interest, losing a friend, etc. Plomin suggests that it is these differences and the way they interact with genetic make-up, which produce personality differences.

One Example – Charles Whitman



- In 1966 – killed 14 and wounded 32 during university shooting
- **Murdered his mother and wife** at home first
- Post-mortem found large **tumour** in amygdala
- He had been receiving drugs for headaches and mood swings
- Charles Whitman visited **doctors and psychiatrists** for help with severe headaches and irrational thoughts
- Wrote a suicide note asking for a post-mortem to help find what was wrong with his mind and to donate all his money to mental health charities

However

[Look back at UT Tower Shooting | Austin, TX 2006](#)
([youtube.com](#))

- An abusive father.
- High achiever at school but dismissed from university following a prank.
- Joined marines and promoted quickly, but-
- Court martialled for gambling, demoted then discharged.
- Returned to university and got a job as a traffic surveyor.
- Parents divorced - mother moved away.
- Contributory factors?



Evaluating Biological Explanations for Criminality

- Knowledge of biological causes could lead to better treatments.
- Whilst biological evidence exists, it is impossible to separate the effects with those of the environment.
- We are long way from understanding biological basis of crime.
- Biological explanations have serious ethical implications and do not necessarily address the issues of rehabilitation and treatment.
- Moir and Jessel (1995) have suggested that brain dysfunction can account for impulsive and seemingly irrational crimes, some of which involve violence.
- Moreover, they suggest that brain scans could identify the disorder in young children who are already showing behavioural problems and that treatment (Ritalin (a stimulant), biofeedback and parental training) could possibly prevent these children growing up to be seriously antisocial.
- Again, think of the potentially significant ethical issues raised with this...



Part 2: Psychological Explanations for Crime

Intelligence
and crime

Developmental
elements of
criminality

Executive
function and
crime

Interpersonal
skills and crime

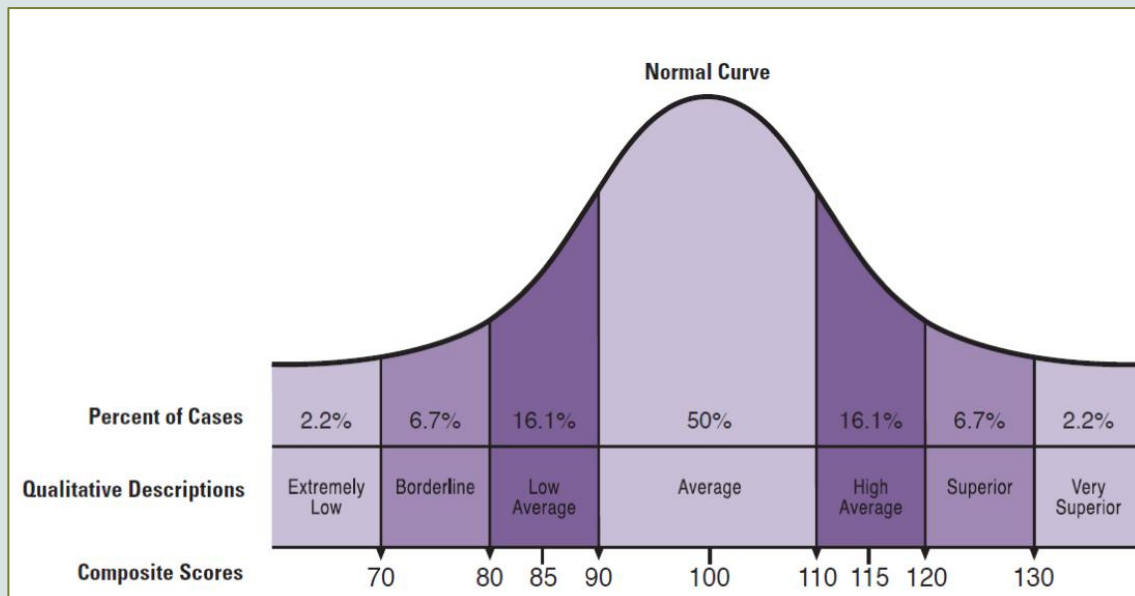
Familial factors
and crime

Abuse and
neglect

Social factors
in criminality

Traditional
Psychological
explanations

Intelligence and Crime



Percentage of population which fall in each category.

* Note these are **not** percentiles.

- Many researchers believe the causes of crime are **sociocultural**: poverty, ethnicity, etc., while other researchers stress the importance of **intellectual** functioning.
- Some studies purport that **low intelligence** is directly associated with poor performance in school, business achievements, social adaptation and integration, and thus **indirectly with delinquency**.
- Herrnstein and Murray (1994) propose that cognitively limited individuals will turn to social ills.
- Cullen et al., (1997) have integrated the research on IQ and crime and found a modest correlation of 0.3.
- Meta-analyses suggest a correlation between IQ and delinquency of around 0.2, with risk factors at around 0.5.
- What are the implications of these findings?

Some thoughts

- The relationship between IQ and crime is not straightforward, confounded by factors such as- large family, low income, school failure and impulsive behaviour.
- Those who do badly at school often cannot foresee the consequences of their behaviours.
- It has been reported that many offenders have marked **neurological impairments** in executive function; problems with attention, concentration, abstract reasoning, goal formation, planning, self-monitoring etc (Raine, 2005).
- Hence it is likely that **IQ and criminality** are part of a much **wider combination** of factors contributing to crime.

- **Language development** - Verbal deficits and impaired language development are associated with crime and delinquency (Leech et al., 2008)
- Antisocial behaviour and aggression are linked to low language proficiency as young as age 2 and continue throughout the lifespan (Dionne, 2005). Why?
- Language is used to solve problems, to negotiate and to empathise. The development of language is associated with an important pro-social interactive tool (Dionne, 2005).
- Delayed language acquisition is associated with increased stress and frustration (Keenan and Shaw 2003).
- Language delay is observed in Males with disruptive behaviour in preschool and later but not in females.
- Coren (2001) postulates that **language is a crucial tool for regulation of our own behaviours**, impulses and emotions.

Self-regulation Skills and Executive Function

- Self-regulation is one of the most important skills in the prevention of antisocial behaviour.
- It refers to the controlling and altering of behaviour and emotions to shift focus and attention. (Eisenberg et al., 2004).
- An inability to self-regulate has been found to relate to early-onset aggression, violence and substance abuse.
- A degree of self-regulation is related to temperament, but it is also learned via social interactions and the environment (Buckner et al., 2003). Self-regulation and executive function are closely related.
- In addition, research demonstrates that low levels of dopamine in the FC are linked to poor self-regulation and faulty executive function (Gotay et al., 2004). **Remember that the FC is one of the last brain structures to mature.*
- The symptoms take time to develop and largely follow a biologically determined pathway. E.g. 17 months, adolescence and early adulthood.
- It refers to deliberate problem solving and the regulation of thoughts, behaviour and emotions. It is crucial in understanding criminality as these individuals are less able to override maladaptive responses and maintain personally beneficial behaviour (Zeier et al., 2012).
- According to Nigg et al. (1999) there is a problem with the PFC, which is also the hallmark of ADHD (Buckner et al., 2003).

ADHD and Conduct Disorder

ADHD

- The primary causal factor is **inhibitory** problems due to neuropsychological deficits (Barkley, 1997) affecting motor control.
- However, there is much mis-diagnosis.
- Why is ADHD associated with criminality?
- The behaviour is often annoying, inappropriate, irritating and frustrating.
- This leads to rejection from peers and particularly so if perceived to be aggressive.
- Approximately **50% of youths incarcerated** are believed to suffer from ADHD (Young et al., 2010).
- Cahill et al. (2012) prevalence in prison is much higher than in general population.

CONDUCT DISORDER

- Often **co-occurs with ADHD**, with 50% of disruptive children having both. (Coid, 2003).
- Conduct disorder increases the symptoms of ADHD and having **both is a powerful predictor** of violence, criminal behaviour and substance abuse (Flory et al., 2003).
- According to the APA (2013):
- *‘It is a precursor of adult crime and is a repetitive and persistent pattern of behaviour, violating the rights of others’.*

Deficient Interpersonal Skills and Peer Acceptance

- **Peer rejection** is one of the strongest **predictors** of involvement with serious offending, especially violence (Cowan & Cowan 2004).
- **Rejection starts early**, around the age of 5 where these children show signs of behavioural, emotional and social deficits, particularly violence or aggression.
- **Peer acceptance is crucial** for an individual's development and a lack of this can lead to anti-social behaviour in later life.
- However, a problem arises due to research being almost exclusively in males.
- **Low empathy** is reported, **specifically for low cognitive empathy** as opposed to emotional empathy, with a strong correlation being reported between cognitive empathy and offending behaviour (Jolliffe & Farrington 2004).

[Easy as pie: Farrington \(youtube.com\)](https://www.youtube.com/watch?v=...)

Familial Factors and Crime



- The Cambridge Study: Farrington (1996) – looked at males in London over period of **24 years**.
- Interviewed the **boys** at age **8, 10 and 14** and interviewed the **parents and teachers**.
- **Followed them up** through the Criminal Records Office until they were **48**.
- At age **32, 37% of them held a criminal** record.
- There were **411 boys** overall, but only **7%** of them accounted for **50% of the crimes**.
- Farrington et al., suggests that this demonstrates a link between family and crime.
- There was evidence of **intergenerational crime** across three generations.

The Farrington Study

- The Farrington study is a key study, as it clearly shows the interaction between genes and socialisation (environment).
- It demonstrates that not only is there a genetic component to crime, but that parental modelling, monitoring and disciplining practices and the tendency to mate with similar individuals all contribute to intergenerational crime.
- It also shows that the environment places limits on an individual's ability to exercise their free will.

Parenting Styles and Child Rearing

- Poor parental supervision is the strongest and most replicable predictor of offending (Smith & Stern, 1997).
- Lack of parental supervision is associated with inconsistent punishment. Harsh punishment is effective in the short term, but in the long run can lead to violent delinquency (Straus, 1991).
- Parental discipline and how parents react to their child predicts later convictions. Harsh punitive parents at age 7-11 were responsible for 40% of the convictions in later life.
- The same was found for erratic or inconsistent parents too. Likewise, cold rejecting parenting styles predicted later violence convictions, even more so if the parents were punitive and cold compared to punitive and warm. Coopersmith found that it was linked to low self-esteem and delinquency.
- Authoritarian parents were second most influential factor for predicting violent convictions. Maxfield & Widom (1996) looked at children who were abused up until age 11. They were significantly more likely to offend within 15 years.
- Power assertion involves physical punishment and criticism with little rewarding or praise. Physical punishment encourages the child to consider aggression as acceptable because an authority figure uses it

Other Considerations

- **Size of family:** Larger families - less attention.
- Also younger siblings model their behaviour on that of older siblings - the '**contagion effect**' (Bailey, 2005).
- Interactions within the family: Correlation between crime and poor interaction within the family. Parental conflict, poor use of language and communication, mistrust of other family members.
- Disruption of family home: remember Bowlby (1946) who maintained that 'coming from a broken home led to delinquency'.
- Rutter (1971) argued that it was the amount of **discord and distress** rather than the 'broken home'.
- Loss of a parent through death does not necessarily lead to delinquency.

Criminal Parents and Delinquent Friends



- There are **intergenerational continuities** in exposure to **risk factors**, which could be exacerbated by criminal parents contributing to lack of supervision.
- However, it is also **possible** that there are **official biases** towards certain families.
- Delinquent friends are taken as a predictor of later offending (Battin 1998) because delinquent acts most often occur in small groups and not alone. Usually however, by the **age of 17, criminal activity will decrease**, as gang friendships have broken down.
- Thornberry (1994) identified 3 main variables as the main predictors of juvenile delinquency: **poor parental supervision, low parental reinforcement** and **low involvement** in family activities.

Deprivation and Privation

DEPRIVATION

- Remember Bowlby and his work on attachment.
- Bowlby's research on 44 juvenile delinquents, compared with 44 controls led him to conclude that:
- *'Maternal separation/deprivation in the child's early life caused permanent emotional damage'.*
- He diagnosed this as a condition and called it **Affectionless Psychopathy**

PRIVATION

- Remember the work of Rutter, who coined the term 'Privation'.
- Rutter drew a distinction between deprivation ,which really means the loss of the primary attachment figure after attachment has developed whereas privation is the failure to form any attachment in the first place.

Abuse and Neglect



- Frederick and Rosemary West
- Fred was known to be of a low level of intelligence and cognitive functioning, but-
- Both Fred and Rosemary suffered terrible emotional & sexual abuse in their childhood
- Could this be what created these 'serial killers'?
- What do you think?

Abuse and Neglect

- Findings strongly support the relationship between child abuse and neglect and delinquency, adult criminality, and violent criminal behaviour.
- **Abused** and neglected children are **4.8 times more likely** to be arrested as juveniles; 2 times more likely to be arrested as an adult, and 3.1 times more likely to be arrested for a violent crime than matched controls (English, 2002).
- *`The violent children of the future are now babies`* (Gerhardt 2004: p167)

- Ressler et al. (1988) - Out of **36 sex murderers interviewed, 42% were found to have been sexually abused as youngsters.**
- Dietz & Warren (1995) found 76% of the 41 serial rapists that they interviewed were abused when young.



Addiction and Crime

- Police estimate that **half of crime is drug-related**.
- A number of factors link substance abuse to crime, not just the substance itself.
- Different drugs are associated with different crimes, but the main options to support drug habits quickly move from theft to drug dealing and prostitution.
- The relationship between alcohol and crime is less clear, but findings suggest that: - **Murders** are committed by people under the influence of **alcohol 65%** of the time, - **Stabbings 75%** of the time, - **Assaults 70%** of the time and - **Domestic assaults 50%** of the time.



- Addiction is a combination of personal and environmental factors.
- Addiction, substance abuse and alcoholism all occur in offender populations, which has led many to propose a personality type or an underlying predisposition...
- But there is little if any evidence of this...
- However, there is evidence of risk factors and antecedents being the same for addiction and criminality.

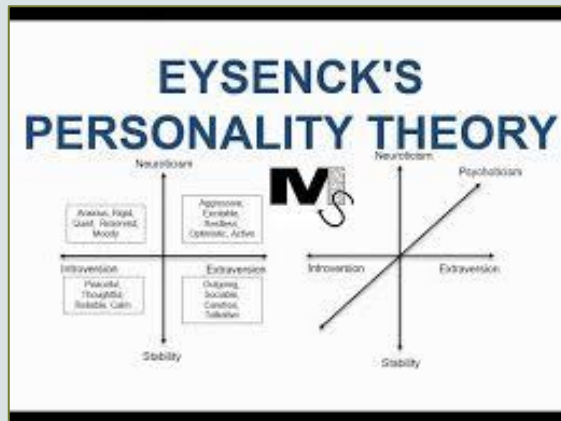
Addiction and Risk-taking

- **There are four ways in which addiction and risk behaviours are related-**
- **Interactive:** both careers develop simultaneously (Pudney, 2002).
- **Shared:** both have common single reinforcing factors which could be psychological, social or environmental (Bennett & Holloway (2005).
- **Multivariate:** crime and abuse are linked to macro and micro factors which are complex (Seddon, 2000).
- **Spurious:** unconnected and happen coincidentally by accident.

- Remember **Eysenck's Biosocial Theory of Personality?**
- Eysenck is not saying that criminals are born, but that a combination of neurological, environmental and personality factors increase the likelihood of antisocial behaviour.
- According to his theory, three main factors relate to temperament: **extroversion, neuroticism and psychoticism.**

Eysenck

- Extraverts need much **stimulation**, which lends itself to criminal risk-taking. The **RAS arouses the cortex and keeps it responsive** to stimulation. In extroverts the RAS is under-aroused.
- Whereas **extraversion** is related to the **CNS**, **neuroticism** is related to the **ANS**; it becomes aroused easily and remains aroused for longer. I.e. the ANS of a neurotic is highly labile.



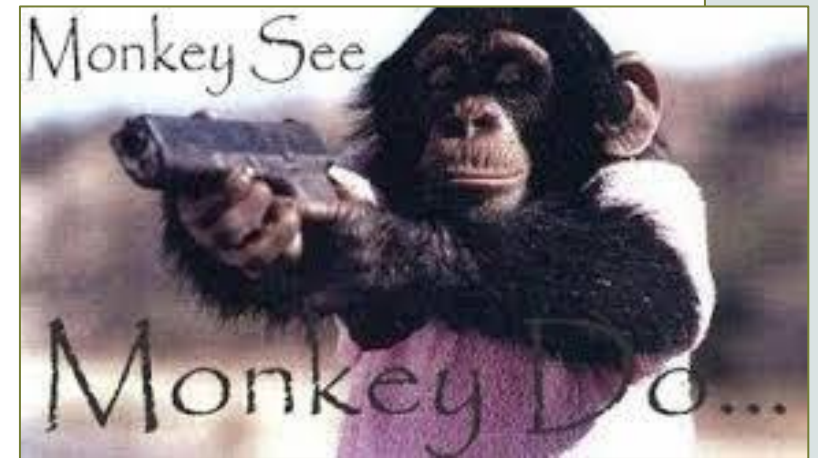
EYSENCK'S PERSONALITY THEORY: A Deep Dive into Criminal Propensity (youtube.com)

- Criminality is an interaction between genes and environment:
- Three dimensions to personality: -
- Extraversion - Introversion -
- Neuroticism - Stability -
- Psychoticism - Normality
- Eysenck claims that most criminals are extraverts - they gain arousal from crime, and if also neurotic, they would not learn from their mistakes.
- He later added Psychoticism to criminal behaviour due to their cold and uncaring behaviours.

Social Factors and Learning theory

- Remember **Classical and Operant Conditioning?**
- Classical conditioning explains how we learn criminal activity through associating the criminal act with positive rewards and feelings.
- Once the association is made, operant conditioning reinforces the behaviour and the pattern is set.

- Rewards – what might be the motivation for crime?
- Material gain
- Power
- Peer respect
- Competence
- Increased self-esteem
- Excitement and thrill



Sutherland (1939) Differential Association

- The learning of criminal behaviour is no different from the learning of any other behaviour.
- Most learning takes place within close personal groups.
- Learning includes:
- **Techniques** to carry out certain crimes.
- **Specific attitudes** and motives conducive towards committing crime.

- **Assumptions:**
- Criminal behaviour is learned.
- Learning happens through association with peers.
- Close friends and family influences.
- Social norms are stronger than law.
- Operant conditioning – too simplistic.
- Why doesn't punishment stop crime?
- Social organisations we are socialised into Sub-cultures.

Bandura: Social Learning Theory

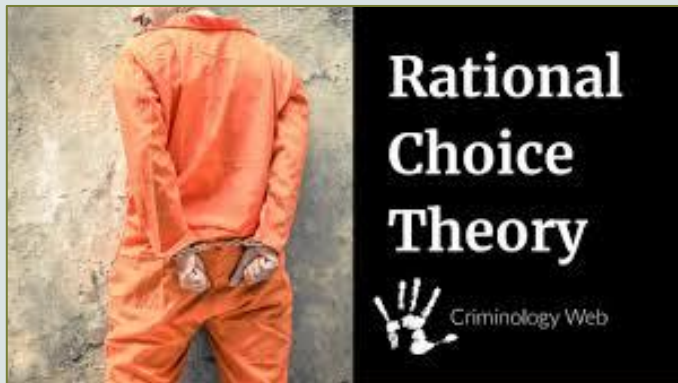
- Where does the motivation come from to commit crime?
- Who/where are children more likely to learn criminal behaviour from?
- How would Bandura explain the many gender differences we see reported in crime?
- ***Research evidence to support the SLT of criminal behaviour comes from the Cambridge study***



- Based on the principles of operant and classical conditioning, **social learning theory** would expect most criminals who commit a second crime to have committed the same crime twice, rather than two different crimes.
- Observational learning is another aspect of social learning theory which uses the principles of vicarious reinforcement.
- Modelling explains how observational learning can only take place where someone identifies with another person in some way.

Rational Choice Theory

- Rational choice theory originates from criminology and holds that people **freely choose** their behaviour and are motivated by the avoidance of pain and the **pursuit of pleasure**.
- Individuals evaluate their choice of actions in accordance with each option's ability to produce advantage, pleasure and happiness.
- Rational choice provides a micro perspective on why individual offenders decide to commit specific crimes; people choose to engage in crime because it can be rewarding, easy, satisfying and fun.
- The central premise of this theory is that **people are rational** beings whose behaviour can be controlled or modified by a fear of punishment.

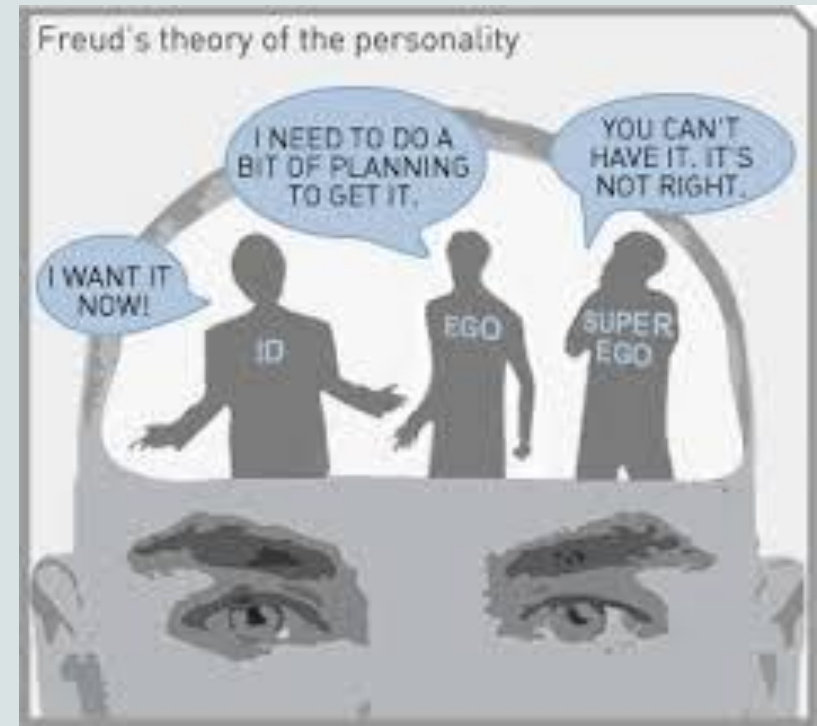


- This perspective assumes that crime is a personal choice, the result of individual decision-making processes.
- This means that individuals are responsible for their choices and thus individual offenders are subject to blame for their criminality.
- Assumptions about the decision-making process and behavioural motivations-
- It is held that people decide to commit crime after careful consideration of the costs and benefits of behaving in a certain manner.
- This involves considering both personal factors, which may include a need for money, revenge, or entertainment, and situational factors such as the target/victim's vulnerability and the presence of witnesses, guardians, or the police.
- Rational choice focuses on the opportunity to commit crime and on how criminal choices are structured by the social environment and situational variables.

Before we Conclude

- Could Freud explain Criminality?
- Traumatic event leads to underdeveloped superego and a lack of morality.
- Alternately, a child might develop normal superego, but the superego itself is deviant from an internalization of the same sex parent.
- Consequently, a son raised in family with criminal father develops superego that does not react to criminal acts that the father would do.
- Children need to progress from the pleasure principal to the reality principle.
- How does the child do this? Freud - The child needs a stable home environment to successfully make this transition.

- **Strong id and weak superego= criminal**
- Harsh punishment no good because it simply encouraged violence



Concluding Comments

- **Psychobiological explanations** of criminality, once unpopular are **now widely accepted** under the rubric of behavioural genetics.
- There is strong evidence that **crime runs in families**.
- The cause of this is likely to be a **complex mixture** of heredity, parenting, social and economic factors.
- Both **learning and personality** theory have been applied to crime.
- **Social learning theory**, incorporating **cognition and emotion** is the predominant contemporary theory applied to understanding crime.



Preparing for your Forensic Case Formulation

Johnstone, L., & Dallos, R. (2014). *Formulation in Psychology and Psychotherapy: Making Sense of People's Problems* (2nd ed). Routledge.

