



**2024-25 FALL**

**FORENSIC  
PSYCHOLOGY**

**WEEK 4**

# Psychopathy

# THEODORE ROBERT BUNDY



- Ted Bundy was an American serial killer.
- He kidnapped, raped and killed his victims.
- Bundy was overtly normal, free from insanity or delusion, and his crimes were instrumental, organised and calculating.
- After more than 10 years of denial, he admitted that he had committed more than 30 murders.

# Psychopathy

- The term **psychopathy** refers to an **individual suffering from a severe disorder of personality** that is strongly **linked with antisocial behaviour**.
- The key clinical characteristics of the condition are a **callous disregard for others** and a **lack of behavioural controls**.

# Psychopathy

- The condition is associated with **high levels of crime** and psychopaths are thought to account for a **disproportionate amount of crime compared with non-psychopathic individuals**.
- Although **clinically** elevated levels of **psychopathic personality** may be **rare** in the general population, **continuities in the mechanisms underlying psychopathic personality nonetheless exist**.

# psychiatric patients

- appear outwardly normal,
- nonetheless extremely callous,
- unable to express remorse or guilt,
- seem to be devoid of human emotion,
- typically of above average intelligence
- seemingly charming,
- lack the capacity for love,
- social behaviour is distinctly antisocial,
- show a notable lack of anxiety or neuroses

# ASSESSMENT OF PSYCHOPATHY

- There are several tools available for assessing psychopathic traits in individuals.
- **The Psychopathy Checklist – Revised (PCL-R; Hare, 1991, 2003)**
- **semi-structured interviews** and information held on file
- **20 items**, each of which is scored from 0 to 2, with a **maximum** possible score of **40**

# The PCL-R

- items are grouped into two broad factors:
  - **Factor 1** assesses the **interpersonal/affective** features of psychopathy,
  - **Factor 2** measures the **lifestyle/antisocial** features of the disorder
- originally thought to be underpinned by two distinct factors, further research suggests the presence of three (Cooke & Michie, 2001), or even four (Hare, 2003) distinct factors or facets



# PCL-R items (Hare, 2003)

## Factor 1 – interpersonal/affective features

Glibness/superficial charm (Interpersonal)

Grandiose sense of self-worth (Interpersonal)

Pathological lying (Interpersonal)

Conning/manipulative (Interpersonal)

Lack of remorse or guilt (Affective)

Shallow affect (Affective)

Callous/lack of empathy (Affective)

Failure to accept responsibility for own actions (Affective)

# PCL-R items (Hare, 2003)

## Factor 2 – lifestyle/antisocial features

Need for stimulation/proneness to boredom (Lifestyle)

Parasitic lifestyle (Lifestyle)

Poor behavioural controls (Antisocial)

Early behaviour problems (Antisocial)

Impulsivity (Lifestyle)

Irresponsibility (Lifestyle)

Juvenile delinquency (Antisocial)

Revocation of conditional release (Antisocial)

Criminal versatility (Antisocial)

# PCL-R items (Hare, 2003)

Additional items (not loading on Factors 1 or 2, sometimes referred to as orphan items)

Promiscuous sexual behaviour

Many short-term marital relationships

- Variants of the PCL-R have also been developed.
  - ✓ PCL-Youth Version
  - ✓ the PCL Screening Version
  - ✓ the Psychopathic Personality Inventory
  - ✓ the Levenson Self Report Psychopathy scales

# Dissociating Psychopathy from Antisocial Personality Disorder

- The clinical condition of **psychopathy** bears a **strong overlap** with the construct of **antisocial personality disorder (ASPD)**, though the **two disorders are dissociable**.
- **ASPD is a diagnostic category** of the DSM-5; which is based predominantly on the **behavioural profile** of an individual.

# Dissociating Psychopathy from Antisocial Personality Disorder

- **ASPD** is characterised by a disregard for **societal norms and rules** that can take the form of a **persistent pattern of antisocial behaviour, impulsivity and irresponsibility.**
- **ASPD** is **highly prevalent in offenders**, with 60–70% of all male offenders receiving a diagnosis.
- **Unlike psychopaths**, individuals with **ASPD do not necessarily show callous and unemotional traits.**

# Dissociating Psychopathy from Antisocial Personality Disorder

- Although **many offenders with a diagnosis of psychopathy** would also be **labelled as** suffering from **ASPD**, only **a third** of those with a diagnosis of **ASPD** would meet the **diagnostic criteria for psychopathy**.
- Offenders **with a diagnosis of ASPD and without psychopathy** are also distinguishable in terms of **brain structure** with psychopaths,
- **but not those with ASPD in the absence of psychopathy**, showing **structural abnormalities** in areas associated with **empathy and morality**.

# Psychopathic Subtypes

- Karpman described variants of the condition as *primary* and *secondary*.
- **Primary psychopaths**, in keeping with the original formulation of the disorder, show a **lack of nervousness** and an **inability to experience fear and anxiety**.
- **Secondary psychopaths** appear **neurotic and anxious**.

# Differentiating the emotions of anxiety and fear

Anxiety	Fear
Long acting	Expressed in response to current dangers
Directed against the potential occurrence of diffuse future threats.	Threat is specific and definable
Slow onset	Quick onset
Not associated with particular facial expressions	Accompanied by arousal, distinctive facial emotional expressions and fear related behaviours
Associated with hypervigilance and hyperarousal	Results in the release of escape and avoidance behaviours
Extended amygdala and the bed nucleus of the striaterminalis critically involved	Central amygdala nuclei involved
Reduced by both alcohol and benzodiazepines	Strong effect of benzodiazepines but less so alcohol



# Dissociating Psychopathy from Antisocial Personality Disorder

- One of the still-to-be-resolved debates whether antisocial behaviour represents:
  - a core trait of psychopathic personality, or
  - a behavioural consequence that is expressed as a product of having a specific collection of personality traits.

# PSYCHOPATHY AND AGGRESSION

- **Psychopathy is associated** with high levels of **violent behaviour**.
- However, the **relationship** of psychopathy and violence **is not straightforward**.
- Acts of **aggression** can be **classified** as either **reactive** or **proactive/instrumental**.
- High levels of instrumental aggression **distinguish** psychopaths from **sufferers** of other disorders that are similarly linked with elevated levels of aggression or violence.

# PSYCHOPATHY AND AGGRESSION

- **Reactive aggression** refers to an **unplanned** or **impulsive act** of violence **in response** to some form of **provocation, threat or danger**.
- By contrast, **instrumental aggression** is characterised by **goaldirected acts** of violence (for example, to gain money or drugs) that are typically executed in a **predetermined** and **calculated** manner.

# CORRELATES OF PSYCHOPATHY IN ADOLESCENTS AND CHILDREN

- There has been **much debate** over whether adolescents can be diagnosed as psychopaths.
- There have been concerns that any **apparent callous and unemotional personality features** seen in adolescence may in fact be **transient and not enduring** traits.
- The term “**conduct disorder**” (CD) is applied to **adolescents and children** who show persistent **antisocial behaviour** and whose actions appear **impulsive and irresponsible**.

# GENETIC BASIS OF PSYCHOPATHY

- Karpman (1941) who noted that the core **personality features** of the condition may be **familial**.
- Recent work has supported this idea with several studies now showing that **callous and unemotional (CU) traits may be heritable**.
- Studying **psychopathic traits** in 353 male **twins**, the results suggested that there was an **overall genetic influence** on genetic and environmental contributions to the
  - **interpersonal,**
  - **affective** and
  - **behavioural/lifestyle** features of psychopathy.

# FAMILY FACTORS ASSOCIATED WITH THE DEVELOPMENT OF PSYCHOPATHY

- Early **traumatic experience**, whether it is via **neglect or abuse**, is often considered to be a **predictor of antisocial behaviour** in later life.
- The **relationship** of early adverse experiences and psychopathy, however, is **complex**.
- The **affective deficits** that are fundamental to psychopathy are assumed to be **inherited** and therefore **should be relatively immune** to the influence of **societal and environmental** factors.

# FAMILY FACTORS ASSOCIATED WITH THE DEVELOPMENT OF PSYCHOPATHY

- The **lifestyle and antisocial features** of the disorder, that are related to **Factor 2 on the PCL-R**, are assumed to be **acquired** and may constitute an **emotional response to a harsh environment**.
- These environmental factors would include
  - **parental conflict,**
  - **rejection,**
  - **neglect** and
  - **harsh or inconsistent punishment.**

# FAMILY FACTORS ASSOCIATED WITH THE DEVELOPMENT OF PSYCHOPATHY

- We need to **distinguish** between early abuse and neglect.
- **High PCL scores** of adults were associated with the experience of **childhood abuse and neglect**.
- **Psychopathic tendencies** are more associated with **parental neglect** rather than early physical abuse and this **difference influences** potential **neurochemical changes** in psychopaths.



# ATTACHMENT, PSYCHOPATHY AND OFFENDING

- **secure, preoccupied, dismissive and fearful**
- These four styles are thought to result from **differing levels of anxiety** over abandonment and the **avoidance of intimacy**.
- **secure attachment** style is characterised by **low levels of anxiety and avoidance**
- **preoccupied and dismissive** styles result from **high levels of anxiety and avoidance**
- **fearful attachment** styles reflect **heightened levels of both anxiety and avoidance tendencies**

# ATTACHMENT, PSYCHOPATHY AND OFFENDING

- Children who had experienced **early physical abuse** tended to show an **avoidant** attachment style whereas **neglect** was associated with **ambivalent** attachment.
- **Physically abused** children showed **greater levels of aggression** and **antisocial behaviour** than neglected and control children.
- **Attachment difficulties** are associated with **criminality and drug abuse** and a **dismissive style** of attachment has been **associated with antisocial personality traits**.

# ATTACHMENT, PSYCHOPATHY AND OFFENDING

- A direct **link between insecure attachment style and psychopathy** has been reported.
- **Incarcerated psychopaths** typically show **dismissive** attachment styles.
- **Dismissive attachment** style may be **predictive of antisocial behaviour and personality disorders in general**, rather than psychopathy.

# FACIAL EXPRESSION RECOGNITION

- The **inability** of psychopaths **to detect facial expressions** communicating distress, notably **fear and sadness**, leaves them vulnerable to continuing to act in **fear inducing** ways.
- As **psychopathy** represents a **developmental** disorder these deficits would be expected to be present **across the lifespan**.
- **The amygdala** has been assumed for some time as being the **neural structure** that is most critically involved in the **processing of emotional facial expressions**, and expressions of **fear** in particular.

# FACIAL EXPRESSION RECOGNITION

- Patients with **bilateral amygdala damage** show **impaired recognition** of fear face affect.
- Patients with **unilateral amygdala damage**, typically show **intact recognition** of fearful faces.
- The deficits in fearful face **recognition** associated with **amygdala damage** may result from problems **retrieving** previously acquired **knowledge** about the emotion of **fear**.

# A Neurobiological Model of Fearful Face Recognition Deficits in Psychopathy

- It would be **predicted** that **psychopathy is associated with low levels of amygdala** activity.
- **Increased activity in prefrontal** areas, implying that **high level cognitive** mechanisms are being deployed to **solve the emotional recognition task**.
- The **abnormal amygdala functioning in CU children** when processing fearful facial expressions appears to be **linked to CU traits** rather than ADHD or generally antisocial behaviour. (Callous-Unemotional=CU)

# Eye Scan Paths, Fearful Face Recognition and Psychopathy

- **Children with CU** traits show a tendency to **look at the mouth** region of faces rather than the eyes.
- This **deficit** correlates with a **failure to be able to detect facial expressions** of fear, potentially because the eyes represent the major source of facial information relating to this emotion.
- A similar **lack of attention to the eye region** has also been noted in relation to the **interpersonal/affective, but not the lifestyle/antisocial features** of psychopathy among **adult male non-offenders**.
- **Reduced attention to the eyes** was related to the **affective aspects**, but not the behavioural aspects, **of psychopathic personality**.

# PSYCHOPATHY AND AVERSIVE CONDITIONING

- **Neuroimaging-based** experiments have likewise demonstrated that the **amygdala** is **central** to the formation of **conditioned emotional responses in humans**.
- These **deficits**, which are thought to be present in **childhood**, **limit the ability** to learn that one's actions are causing distress to another, and thus **compromise early moral socialisation**.



# NEUROCHEMISTRY OF PSYCHOPATHY

- Relatively **little is known** about the neurochemistry underlying psychopathy.
- One noticeable exception has been a study on **oxytocin levels in offenders**.
- **Oxytocin is a neuropeptide** that is released from the paraventricular nucleus of the **hypothalamus**.
- Within the brain, **oxytocin plays critical roles** by **binding to** receptors in the medial nuclei of the amygdala to drive the need **to form attachments** and **cement interpersonal bonds**.
- **Oxytocin** seems to **enhance both prosocial and antisocial emotions**, depending on the specific **situation and context** in which the participant is placed.

# NEUROCHEMISTRY OF PSYCHOPATHY

- The **levels of intracerebral oxytocin** can be raised **by** taking the neuropeptide **intranasally**.
- This process has been associated with the **increased** expression of many **prosocial behaviours** including **trust, emotional empathy and altruism**.
- However, recent findings have also shown that **intranasal oxytocin can increase envy and gloating, and intergroup bias**, including a tendency to **dehumanise racial outgroups**.

# NEUROCHEMISTRY OF PSYCHOPATHY

- **In convicted serious offenders, the oxytocin levels were highly correlated with Factor 2 scores on the PCL-R, indicative of raised oxytocin levels in relation to the lifestyle and antisocial features of the disorder.**
- **Adolescent girls who had experienced severe early abuse showed grossly elevated urinary oxytocin levels, and lower levels of salivary cortisol following a laboratory stressor.**

# CONCLUSIONS

- Current research suggests that **psychopathic traits are identifiable in children and adults**, and among forensic and non-forensic samples.
- These traits have a **genetic component** and are often accompanied by a variety of **cognitive, affective and functional correlates**.
- **The aggressive and antisocial behaviours** of psychopaths are typified by **instrumental motives** and the **use of violence for personal gain**.

# SUMMARY

- **Psychopathy** refers to a constellation of **personality traits** associated with **antisocial behaviour** and **instrumental aggression**.
- **Both genetic and environmental factors** have been linked with the **development of psychopathic traits**.

# SUMMARY

- **Psychopaths show affective abnormalities including difficulty processing and learning from aversive social and emotional cues.**
- **The neurobiology of psychopathy is thought to be closely linked with amygdala dysfunction and impaired empathic development.**