



A-LEVEL PSYCHOLOGY REVISION NOTES

Forensic Psychology

AQA Psychology 7182 (A-level only)

2025 specification · spec section 4.3.9 · A-level Paper 3

Contents

1. **Offender Profiling: The Typology and Data-Driven Approaches**

2. **Biological Explanations of Offending: Genetic and Neural**

3. **Psychological Explanations: Eysenck's Criminal Personality**

4. **Psychological Explanations: Cognitive and Differential Association**

5. **Dealing with Offending: Custodial Sentencing and Behaviour Modification**

6. **Dealing with Offending: Anger Management and Restorative Justice**

2025 spec changes: the **atavistic form**, **psychodynamic explanations of offending** and **recidivism as a focal topic** have been **removed**. "Top-down" profiling is now the **typology approach**; "bottom-up" profiling is the **data-driven approach**. Past-paper questions on the atavistic form or psychodynamic offending, and those using "top-down"/"bottom-up" wording, are now obsolete.

AQA 2025 SPECIFICATION — FORENSIC PSYCHOLOGY (4.3.9)

- **Offender profiling:** the typology approach (organised/disorganised); the data-driven approach (investigative psychology; geographical profiling).
- **Biological explanations:** genetic and neural.
- **Psychological explanations:** Eysenck's criminal personality; cognitive explanations (moral reasoning; cognitive distortions — hostile attribution bias, minimalisation); differential association theory.
- **Dealing with offending:** aims and psychological effects of custodial sentencing; behaviour modification; anger management; restorative justice.

1 Offender Profiling

The Typology Approach (formerly "top-down")

Developed by the FBI, this approach uses crime-scene evidence to classify an offender into a **pre-existing category** and predict their characteristics:

Type	Features
Organised	Planned, controlled crime; targeted victim; few clues left; higher intelligence, socially and occupationally competent.
Disorganised	Spontaneous, chaotic crime scene; little planning; evidence left behind; lower intelligence, socially incompetent.

The Data-Driven Approach (formerly "bottom-up")

The British approach builds a profile **from the evidence**, with no fixed types, using two main techniques:

- **Investigative psychology** — statistical analysis of crime-scene details to find patterns and associations (e.g. interpersonal coherence, time/place, forensic awareness).
- **Geographical profiling** — using the spatial pattern of offences to infer the offender's likely base ("centre of gravity"; Canter's circle theory).

Evaluation

A limitation of the typology approach is that its organised/disorganised categories may not be valid.

Canter et al. analysed 100 US murders and found evidence for the organised type but not for a distinct disorganised type, with features overlapping across offenders. This matters because if the two categories are not genuinely separate, classifying an offender into one of them is unreliable, undermining the usefulness of the typology approach as an investigative tool.

A further limitation is that the typology approach is based on a flawed original sample. The FBI categories were derived from interviews with just 36 convicted American serial killers, who were self-selecting and not necessarily honest. Generalising from such a small, unrepresentative sample to other offenders and offence types (especially non-serial crime) is questionable, so the approach lacks population validity.

In contrast, a strength of the data-driven approach is that it is more scientific and evidence-based. Because it builds the profile from statistical analysis of the actual evidence rather than from fixed intuitive types, it is more objective. Canter's profile of the "Railway Rapist" (John Duffy) closely matched the offender, and Lunn and Canter's analysis of 120 murders supported geographical profiling's "centre of gravity" idea, giving the approach genuine empirical support.

However, a counterpoint is that profiling of either kind has limited and inconsistent real-world success.

Surveys of police (e.g. Copson) suggest profiles are often seen as useful but rarely lead directly to identifying the offender, and high-profile failures show profiling can mislead an investigation. This is socially sensitive, because an inaccurate profile risks directing suspicion at innocent people, so profiling is best treated as one investigative aid rather than a reliable method.

2 Biological Explanations of Offending

Genetic Explanations

- **Twin studies** — **Christiansen** found higher concordance for offending in MZ than DZ twins, suggesting a heritable component.
- **Adoption studies** — **Crowe** found that adopted children whose biological mother had a criminal record were at much higher risk of a criminal record themselves.
- **Candidate genes** — **Tiihonen et al.** linked the **MAOA** and **CDH13** genes to violent offending, typically via a gene–environment interaction.

Neural Explanations

- **Reduced prefrontal cortex activity** — **Raine et al.** used PET scans to find reduced activity in the prefrontal cortex (which controls impulse and emotion) in offenders with antisocial personality disorder.
- **Mirror neurons** — reduced empathy in offenders has been linked to atypical mirror-neuron functioning.

*Note: the **atavistic form** (Lombroso's historical idea) was removed from the 2025 spec and is no longer required.*

Evaluation

A strength of the biological approach is supporting evidence from a range of methods. Twin and adoption studies point to heritability, candidate-gene research identifies specific genes, and Raine's brain-imaging provides objective neural evidence. Because these different methods converge on the same conclusion — that biology contributes to offending — the case is stronger than any single study, giving the approach scientific credibility.

However, a key limitation is that concordance is never 100% and twins share environments. MZ twins are not always concordant for offending, so genes alone cannot be the cause, and their greater similarity may partly reflect being treated more alike than DZ twins. This points to a **diathesis-stress** account (as in Tiihonen's gene–environment interaction): a genetic predisposition is only expressed under particular environmental conditions, so a purely genetic explanation is incomplete.

A further limitation is that biological explanations are deterministic and socially sensitive. Claiming that offending is caused by "criminal genes" or an abnormal brain implies offenders are not responsible for their actions, which clashes with the legal principle of free will and has been used in court to argue diminished responsibility. Because such claims could affect sentencing and stigmatise individuals, the research must be communicated with great care.

On the other hand, the approach has valuable real-world and economic potential. Identifying biological risk factors could, in principle, allow early intervention with those most at risk of serious violent offending. Preventing even a small number of people from becoming persistent offenders would bring large benefits to victims and major savings to the criminal-justice system, which is extremely costly.

3 Eysenck's Theory of the Criminal Personality

THE CRIMINAL PERSONALITY

Eysenck argued that the criminal personality scores highly on three dimensions: **Extraversion (E)**, **Neuroticism (N)** and **Psychoticism (P)**.

- **Extraverts** have an under-aroused nervous system, so they seek stimulation and take risks.
- **Neurotic** individuals are unstable and over-react to situations, making behaviour unpredictable.
- **High-psychoticism** individuals are cold, aggressive and lacking in empathy.
- **Socialisation**: people high on these traits have nervous systems that are **harder to condition**, so they do not learn as easily to avoid antisocial behaviour through punishment.

Evaluation

A strength of Eysenck's theory is that it has some supporting evidence and a plausible biological basis. Eysenck and Eysenck found that, compared with controls, prisoners scored higher on measures of extraversion, neuroticism and psychoticism. By linking personality to the nervous system and to conditioning, the theory provides a testable mechanism (poor socialisation) for how personality could translate into offending, which gives it explanatory value.

However, a counterpoint is that later research has failed to support the role of extraversion. Farrington et al.'s review found that offenders tended to score highly on neuroticism and psychoticism but *not* consistently on extraversion. Because a central component of the theory is not reliably supported, this seriously weakens Eysenck's claim that a single "criminal personality" defined by all three dimensions exists.

A further limitation is that the idea of a single criminal personality is over-simplified and may be culturally biased. Offending is extremely varied, and it is unlikely that all offenders share one personality type; Bartol and Holanchock found that Hispanic and African-American offenders in a New York prison were *less* extraverted than non-offender controls, the opposite of Eysenck's prediction. This suggests the theory does not generalise across cultures, limiting its validity.

Finally, the theory relies on self-report personality questionnaires, which reduces validity. Measuring personality through questionnaires is open to social-desirability bias and assumes personality is a stable "score", which many psychologists dispute. If the core construct cannot be measured reliably and objectively, the evidence base for the criminal personality is correspondingly weakened.

4 Cognitive Explanations and Differential Association

Level of Moral Reasoning

Using Kohlberg's stages, offenders are more likely to reason at the **preconventional level** — focused on avoiding punishment and gaining rewards — rather than at the more mature conventional level, so they are more willing to offend if they think they can get away with it.

Cognitive Distortions

- **Hostile attribution bias** — misinterpreting others' actions (e.g. a look) as aggressive or confrontational, triggering a violent response.
- **Minimalisation** — downplaying the seriousness or consequences of an offence ("they could afford it").

Differential Association Theory (Sutherland)

Offending is **learned** through interaction with others. A person learns pro-criminal **attitudes and values** as well as the **techniques** of offending. If their exposure to pro-criminal attitudes outweighs anti-criminal attitudes, they are likely to offend.

Evaluation

A strength of the cognitive explanation is its strong real-world application. Identifying low moral reasoning and cognitive distortions underpins treatments such as CBT and anger-management programmes, which challenge offenders' faulty thinking. The fact that reducing distortions is associated with lower reoffending supports the explanation and gives it practical, economically valuable application in reducing the cost of crime.

However, a limitation of the cognitive explanation is that it may describe rather than cause offending. Cognitive distortions and moral reasoning are typically measured *after* a person has offended, so they may be a consequence of a criminal lifestyle rather than its cause. Because the evidence is largely correlational, the direction of the relationship cannot be established, weakening the causal claim.

A strength of differential association is that it shifted the explanation of crime towards learnable social factors. By proposing that anyone can learn to offend given the right social conditions, Sutherland's theory accounts for offending across all social groups and implies that offending can be "unlearned". This was an important advance over biological accounts and has clear face validity, given the well-known links between offending and one's social environment.

However, a counterpoint is that differential association is difficult to test scientifically. The theory predicts offending when pro-criminal attitudes outweigh anti-criminal ones, yet these attitudes cannot be measured or counted precisely, so the claim cannot be properly falsified. It also struggles to explain why many people exposed to pro-criminal influences never offend — implying that biological and personality factors (Sections 2–3) also matter, and that an interactionist account is needed.

5 Custodial Sentencing and Behaviour Modification

Aims of Custodial Sentencing

- **Deterrence** — putting the individual (and society) off offending.
- **Incapacitation** — removing the offender to protect the public.
- **Retribution** — society taking revenge / the offender "paying".
- **Rehabilitation** — reforming the offender to reduce reoffending.

Psychological Effects of Custodial Sentencing

Prison can have serious psychological effects: **depression, anxiety and raised suicide/self-harm risk; institutionalisation** (becoming unable to function outside prison); and **prisonisation** (adopting the inmate "code"). High rates of reoffending also raise doubts about how well custody achieves its aims.

Behaviour Modification in Custody

Based on **operant conditioning**, usually a **token economy**: inmates earn **tokens** (secondary reinforcers) for desirable behaviour, exchangeable for privileges. Tokens are given immediately to reinforce and shape non-offending behaviour.

Evaluation

A limitation of custodial sentencing is evidence of damaging psychological effects. Studies report high rates of depression, self-harm and suicide among prisoners compared with the general population. This is important because if custody worsens mental health, it may make rehabilitation *less* likely and increase the chance of reoffending on release, undermining the very aims (deterrence and rehabilitation) that custody is meant to achieve.

A counterpoint, however, is that custodial sentencing does meet some aims regardless of its effects. Incapacitation genuinely protects the public while an offender is detained, and retribution may satisfy a societal need for justice. So while custody may be poor at rehabilitation, it is not without value — its success depends on which aim is prioritised.

A strength of behaviour modification is research support for its effectiveness within custody. Hobbs and Holt found that introducing a token economy reduced inappropriate behaviour in young offenders compared with a control group. Because the programme is easy and cheap for staff to run and requires no expertise, it offers a cost-effective way to manage behaviour in institutions.

However, a limitation of behaviour modification is that its effects do not generalise or last.

Improvements in behaviour often disappear once the token economy stops, because the offender's underlying attitudes and thinking have not changed — only their surface behaviour. This makes it inferior to approaches such as anger management (Section 6) for producing lasting change, and it raises ethical concerns about controlling behaviour by withholding privileges.

6 Anger Management and Restorative Justice

Anger Management

A **CBT-based** programme that treats anger as a cause of offending. It has three stages:

1. **Cognitive preparation** — the offender learns to recognise the triggers and early signs of their anger.
2. **Skills acquisition** — they learn coping techniques (relaxation, positive self-talk, social skills).
3. **Application/practice** — they rehearse the skills in role-played provoking situations.

Restorative Justice

Restorative justice focuses on **rehabilitation through reconciliation**. In a supervised meeting, the **victim** explains the impact of the crime and the **offender** takes responsibility and may make reparation. The aims are to help the victim recover and to reduce reoffending.

Evaluation

A strength of anger management is that, by targeting the cause, it can produce more lasting change than behaviour modification. Because it changes the way an offender thinks about and handles provocation, the new skills should transfer to situations outside prison and reduce future offending. This tackling of the underlying cognition gives it a clear theoretical advantage over approaches that only reinforce surface behaviour.

However, a limitation of anger management is that it is expensive and its long-term success is mixed. Programmes require trained specialists and the active commitment of offenders, which not all are willing to give, and follow-up studies show inconsistent effects on reoffending. Anger is also only one cause of offending, so the approach will not help offenders whose crimes are not anger-driven — limiting its general applicability.

A major strength of restorative justice is strong evidence that it reduces reoffending, with clear economic benefit. Sherman and Strang's review found that restorative justice reduced reoffending rates and produced high victim satisfaction. Because lower reoffending means fewer future victims and reduced costs of policing, courts and prison, restorative justice offers substantial economic savings as well as helping victims recover — a powerful "psychology and the economy" argument.

However, a counterpoint is that restorative justice is not suitable for everyone and may be undermined by selection bias. It depends on an offender feeling genuine remorse rather than simply trying to reduce their sentence, and some victims find the process distressing. Because offenders usually volunteer, the impressive success rates may reflect a self-selecting group who were already motivated to change, so the benefits may not generalise to all offenders.

These notes were prepared for [Simply Psychology](#) and cover spec section 4.3.9 of the AQA Psychology 2025 specification (A-level only, Paper 3). The atavistic form, psychodynamic explanations of offending and recidivism (as a focal topic) were **removed** in 2025; "top-down"/"bottom-up" profiling are now the **typology/data-driven** approaches. For deeper coverage, see simplypsychology.org/forensic-psychology.html.