

| Topic: Criminal                                                                                          | Strategy 1                                                                                                                                                                                                                                                                                                                                                                                                                    | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Strategy 2                                                                                                                                           | Evidence                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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| What makes a criminal? (Biological): At least one biological strategy for preventing criminal behaviour. | <p>Use of drugs to change behaviour (use of anti-androgens as chemical castration) – Drugs like anti-androgens aim to reduce levels of testosterone in the body and can help reduce sexual drive.</p> <p>Also, drugs like Leuprorelin have been shown to be successful in the UK with prisoners. This has been coined a form of ‘chemical castration’ which reduces testosterone levels to those of a prepubescent child.</p> | <p><b>Bradbury and Kaye (1999)</b> have shown some success with sex offenders in reducing reoffending through the reduction of sexual behaviour.</p> <p><b>Losel et al (2005)</b> found that when combined with psychological treatments chemical castration was very effective in reducing re-offending rates for some sex offenders.</p> <p><b>Meyer (1992)</b> assessed the outcomes of 40 men taking MPA compared to a control sample of 21 who had refused the treatment. It was found that the MPA males had a re-offending rate of 35% once the treatment had finished compared to a re-offending rate of 55% for the control sample.</p> | <p>Nutritional supplements – use of omega-3 (fish oils) to help significantly reduce aggression, impulsivity, and attention issues in offenders.</p> | <p><b>Raine (2003)</b> found that children aged 3-5 years who took a fish oil supplement every day for 6 months, showed a reduction in delinquency, aggression, and attention problems. When evaluated decades later, the children who received the enrichment programme showed a reduction in antisocial behaviour at age 17 and a significant reduction in criminal behaviour at age 23. This suggests that the fish oil supplements help with neurodevelopment and can subsequently reduce antisocial behaviour in children.</p> <p>Randomised controlled trials in the UK (such as at HM Young Offenders Institution in Aylesbury and Polmont) and the Netherlands showed that prisoners taking omega-3 and micronutrient supplements committed roughly 34% to 37% fewer</p> |

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| The collection and processing of forensic evidence (Biological): At least one strategy for reducing bias in the collection and processing of forensic evidence. | <p>Working in isolation from other evidence using techniques such a 'Sequential Unmasking' - a method of controlling examiner bias by ensuring that irrelevant information that could bias the examiner's decision is filtered out of the process of analysing evidence.</p> <p>Sometimes referred to as Linear Sequential Unmasking (LSU-E).</p> <p>During the process Forensic examiners analyse and document crime scene trace evidence (such as DNA profiles, fingerprints, or toolmarks) completely in isolation before being exposed to suspect reference materials or case hypotheses.</p> | <b>Dror (2026)</b> suggests that Linear Sequential Unmasking (LSU-E) is an effective method of managing the flow of information so as to improve decision making and minimise cognitive bias. LSU-E reduces bias by prioritising information based on its objectivity, relevance, and biasability. Shown to be effective in the collection and processing of forensic evidence. | <p>Educating detectives, judges and juries and the general public.</p> <p>Cognitive biases are decision-making shortcuts that occur automatically whenever people are faced with a situation where they lack sufficient data to make a truly informed decision, lack the time and resources to review the necessary data, or both.</p> <p>Criminal practitioners are subjected to a variety of cognitive biases. By educating detectives, judges and juries about the strengths and weaknesses of forensic science it can help people become more aware of its subjective nature and vulnerabilities to bias. For example, in a court case it may be useful for a judge to ask what an examiner knew about the</p> | <p><b>Dror et al (2013)</b> suggest that educating the justice system and the public about cognitive bias in forensic evidence is critical to preventing wrongful convictions.</p> <p><b>Fenton (2018)</b> believes that injustices are occurring widely because of misunderstandings about the probative value of forensic match evidence. He also advises that lawyers and the judiciary should receive basic training in probability and statistics in order to help reduce cognitive bias.</p> |

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| Collection of evidence (Cognitive): At least one strategy for police interviews. | <p>PEACE Model - A new model of interviewing consisting of five key elements.</p> <p>P = preparation and planning</p> <p>E = engage and explain</p> <p>A = account, clarification, challenge</p> <p>C = closure</p> <p>E = evaluation</p> | <p>Evidence from <b>Walsh and Bull (2010)</b> suggests that the PEACE model leads to more accurate information gathered at interview. They found that 92% of interviewers who did not effectively use the PEACE model failed to obtain a comprehensive account or confessions from suspects or witnesses.</p> <p>In addition an evaluation of the PEACE model was undertaken by <b>McGurk, Carr and McGurk (1993)</b> who found certain improvements in police officers' interviewing such as questioning and listening skills. This suggests that the police officers could also use the PEACE model to help avoid false confessions from the four witnesses in this case.</p> | Forensic Hypnosis – A technique based on the assumption that witnesses may be able to retrieve information under hypnosis that was not available to them otherwise. | <p>Hypnosis increases the total amount recalled, including both correct and incorrect details. It also increases confidence in all recalled material. This combination makes testimony less reliable, not more <b>(Baddeley et al, 2023)</b>.</p> <p>In addition, <b>Kebbell and Wagstaff (1998)</b> state how it has been suggested that hypnosis techniques may have the potential to enhance eyewitness memory in forensic investigations. However, laboratory research shows that increases in recall with hypnosis techniques are often associated with decreases in accuracy, false confidence in incorrect information, and increased suggestibility to leading questions and misleading post-event information.</p> |

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| <p>Psychology and the courtroom (Cognitive): At least one strategy to influence jury decision making.</p> | <p>Yale Model of Persuasion – model of attitude change. It is the study of the conditions under which people are most likely to change their attitudes in response to persuasive messages.</p> <p>This model examines how four core components— Source, Message, Recipients, and Situation; influence attitude change and how those principles apply to persuasion dynamics inside a courtroom and during jury deliberations.</p> <p>In a courtroom setting, every attorney, expert witness, and piece of evidence acts as a persuasive stimulus attempting to shift a juror's attitude or ultimate verdict.</p> | <p>According to <b>Hovland and Janis (1953)</b> a source is most persuasive when they possess credibility, which is defined by two factors: expertise and trustworthiness. In jury decision-making studies an expert witness's perceived neutral status gives them an advantage in bolstering a case (<b>Cutler and Penrod, 1989</b>).</p> <p><b>Hovland and Janis (1959)</b> later proposed the Yale Model of Persuasion, which suggests that there are a number of factors to consider when attempting to persuade an audience. The Source of the message must appear credible and non-biased. The message must have some emotional appeal, and the most important information should be presented first. The recipient's resistance to persuasion is important and this can be reduced by making the situation more informal. The situation can be made more informal by</p> | <p>The CSI Effect - This refers to the impact TV shows/ crime documentaries have on the way in which jury members perceive evidence.</p> <p>Jurors who expect high-tech science such as instantaneous DNA results, microscopic fibre analysis, or fingerprint matches at every crime scene may be reluctant to convict a defendant if that physical evidence is missing, even when strong eyewitness testimony or circumstantial evidence is present. They have a biased CSI view which is unrealistic in real world crime.</p> | <p><b>Schweitzer and Saks (2007)</b> refer to the way in which CSI shows portray forensic science – as 'high tech' and claim That this is produced unrealistic expectations in viewers.</p> <p>However, a study by <b>Kim et al (2009)</b> did not support the notion that CSI (or similar programmes) impacted at all on the way jurors made decisions about evidence.</p> |
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|                                                                           |                                                                                                                                                        | the use of jokes, eye contact and using the audiences' first names.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Crime prevention (Social):<br>At least one strategy for crime prevention. | Creating defensible space -<br>A space is considered defensible if it can be clearly perceived as belonging to a particular person or group of people. | <p><b>Newman (1972)</b> introduced the idea of defensible space as a way of explaining how to reduce crime.</p> <p><b>Newman and Franck (1982)</b> Investigated the relationship between features of neighbourhoods and their impact on crime by looking at real housing developments in the USA. A survey of residents found a positive correlation between building size and fear of, or actual experience of, criminal activity. They claim that in order to prevent crime residents need to see and be seen in their neighbourhoods, to feel safe to report or challenge crime.</p> | Increasing risk of detection – through surveillance like CCTV or neighbourhood watch schemes. | <p><b>Piza et al (2019)</b> conducted a meta-analysis which reviewed data over a 40-year period. Their findings show that CCTV is associated with a significant and modest decrease in crime. The largest and most consistent effects of CCTV were observed in car parks. The results of the analysis also demonstrated evidence of significant crime reductions within other settings, particularly residential areas.</p> <p><b>Welsh and Farrington (2009)</b> found that CCTV caused a modest (16%) but significant decrease in crime in experimental areas compared with control areas. This overall result was largely driven by the effectiveness of CCTV schemes in car parks, which caused a 51% decrease in crime.</p> |

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| <p>Effect of imprisonment (Social): At least one strategy for reducing reoffending.</p> | <p>Anger Management Programmes (AMPs) – in the UK typically combines psycho-educational training, cognitive behavioural therapy (CBT), and practical communication skills to help offenders recognise triggers and stop aggressive reactions.</p> <p>Ainsworth (2000) suggests these should be run as group sessions with offenders and that they usually contain 3 stages: cognitive preparation, skill acquisition, and application practice.</p> | <p><b>Hunter (1993)</b> reported considerable improvements in offenders behaviour such as a reduction in impulsiveness, depression and interpersonal problems after completing an AMP. However, <b>Watt et al (1999)</b> found that AMP's are no more effective with violent offenders.</p> <p><b>Sammut-Henwood et al (2015)</b> found that CBT based anger management achieved a risk reduction of 23% for general recidivism with a reduction of 28% for violent recidivism.</p> | <p>Token Economy Programmes (TEPs) - are behavioural intervention systems used in prisons to manage inmate conduct through operant conditioning.</p> <p>In the context of prison (custody), good behaviour is rewarded with tokens that can be traded for desirable privileges (such as food or television time) and bad behaviour is discouraged through removing such tokens.</p> | <p><b>Hobbs &amp; Holt (1976)</b> conducted a study which involved delinquent boys. They found that when they introduced a token economy system in three juvenile delinquent centres there was a significant increase in the desired behaviours, compared to the control.</p> <p><b>Field et al (2004)</b> looked at a TEPs used with young people with behavioural problems. The programme was generally effective although there were still a number of young people who did not respond. Later these youths were placed on a special programme where the rewards were more immediate and more frequent and the results were positive.</p> |
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