Approaches to Offender Profiling

Offender profiling is the collection of empirical data in order to compile a picture of the characteristics of those involved (Howitt 2002). Offender profiles aim to narrow down the range of possible suspects rather than solve the actual crime (Dwyer 2001). Holmes suggests that profiling is most useful when the crime scene reflects psychopathology e.g. sadistic assaults, and 90% of profiling attempts involve murder or rape.

Holmes and Holmes 1996 suggested that there are three goals to offender profiling; social and psychological assessments of the offender, psychological evaluation of their belongings, and interviewing suggestions and strategies. Social and psychological assessments give information on the possible offender’s age, race, marital status, religion, personality etc. while psychological evaluations of belongings suggest the offender’s belongings e.g. souvenirs, and James Lloyd is an example as he kept shoes from his victims whom he raped. Effective profiles can help police with strategies with interviewing suspects, and in one case a man who needed control gave a confession after being led to believe he was ‘helping’ the investigation.

Two approaches to offender profiling will be discussed; the British ‘bottom up’ approach and the American ‘top down’ approach. Conclusions are drawn from what is found at the scene and does not involve using a classification system from past crimes as much as the USA, making it comparatively idiographic as it doesn’t generalise criminal behaviour and focuses on the individual. The first well known case in Britain involving profiling was by David Canter who drew up an accurate profile of John Duffy – the Railway Rapist – who was responsible for 24 sexual assaults. Canter was correct about the area Duffy lived in, his age, and the fact that he had knowledge of the railway system as he worked for GB Rail. He also mentioned that Duffy would have probably had a criminal record and be under arrest in the time there were no reported attacks, and it was found that Duffy did in fact rape his wife at knife point so Canter was quite accurate.

There are several aspects of a criminal’s behaviour according to Canter which can give important clues about their lives including interpersonal coherence, the significance of time and place, and forensic awareness. Interpersonal coherence is the idea that there is a lot of variation in the amount of control and violence involved in various crimes so while some rapists are abusive and want to humiliate their victims, others are more apologetic (Dwyer 2001). The offender may treat their victim similar to the way they treat women in everyday life – interpersonal coherence. Often the criminal preys on people from within their own subgroup, for example Ted Bundy murdered over 30 students while he himself was one. Sometimes offenders have a grudge against a particular group, and Charles Carl Roberts killed five girls in a school for Amish children in 2006. Clues about the offender can be gained from considering when and where the crime occurred, and could establish where the offender is living. Sometimes offenders have already been interviewed by the police about previous crimes, so their subsequent crimes might indicate this as they try to avoid detection by destroying evidence or by using gloves.

The USA approach to profiling involves drawing conclusions from previous knowledge and categorising crime scenes, using statistics from previous crimes to add information to evidence found at the scene of the crime. In comparison to the British approach it is quite nomothetic – it generalises to the wider population even though criminals are not all the same, have different motives and methods etc. This approach was initially based on a study where 36 convicted sexually orientated murderers e.g. Charles Manson were given in-depth interviews, detailed information was collected from members of the Behavioural Science Unit who were experienced in dealing with sex offenders and murderers, detailed examinations of crime scenes were conducted, and other forensic evidence which might indicate the
nature of the attack and provide information about the victim is also provided. The FBI were able to develop ‘models that would result in the profile of the offender’ and produced a system for classifying several serious crimes e.g. murder and rape.

Murderers were classified as ‘organised’ or ‘disorganised’ depending on information gathered at the crime scene, and organised killers tend to have an above average IQ, normally live with a partner, experience anger/depression at the time of the attack and follow media coverage of the crime. The characteristics of the scene tend to be pre-meditated murder where a weapon was brought with them, self control was shown, and very little evidence was left behind. Disorganised killers tend to live alone near the crime scene, experience severe mental illness, are frightened/confused at the time of the attack and could have been abused as a child. The scene normally suggests there was little preparation, lack of constraint and not much attempt to hide the evidence of the crime scene.

The British and American approaches to profiling are quite artificial as in reality there could be a combination of the two approaches used, and offenders may not fit into distinct categories of organised/disorganised killing which can cause problems for profilers. Holmes and Holmes suggested that crimes offender profiling may help solve are specific and stem from psychopathic behaviour including murders involving mutilation, rape, paedophilia and ritualistic/satanic crimes. Profiling would not be useful for burglary for example as very little evidence is left behind. There is a lack of consistency within the British approach as many individuals providing psychological profiles for police have different backgrounds in psychology and psychiatry and could disagree on which approach is best, potentially damaging the reputation of UK profiling. The USA approach also used very small samples to investigate the approach, as they used murderers who were manipulative and attention-seeking so it is possible that they manipulated the interviewers in some way while conducting their investigation.

Caution must be taken when using profiling as it could point the police in a certain direction and they could miss the real offender completely if the profile turns out to be inaccurate, leaving opportunity for the offender to commit more crimes. Turvey (1999) cites the case of Rachel Nickell who was murdered in front of her young son on Wimbledon common, and Paul Britton constructed a psychological profile who which Colin Stagg fitted, and he was arrested and jailed on remand for a year while a case against him was built. The judge commented that the police had tried to incriminate Stagg using ‘deceptive conduct of the grossest kind’ by using a ‘honey trap’ in an attempt to gain a confession, which failed. Robert Napper was the real killer after admitting his guilt, showing that profiling can lead to investigations being sent off course and wrongly accusing innocent people.

In the UK, Copson and Holloway surveyed detectives who had worked on 184 cases where offender profiling had been used, and believed it had produced identification of offenders in less than 3% of cases and ‘helped to solve’ the crime in 16%, so they concluded that profiling can work very well but not as the way some practitioners would have people believe, as there is nothing to support the idea that complex offender characteristics can be predicted with any great accuracy – so this shows that profiling may not be that effective after all, but Youngs (2008) does cite several studies that show links between offending style and characteristics so a profile could be established to narrow down suspects, but may be very inaccurate.

Some say that profiling is ineffective, unnecessary and unhelpful e.g. Pinizzotto and Finkel (1990) compared profiles written by five different groups (expert profilers, detectives with profiling experience, detectives without profiling experience, clinical psychologist and undergraduates) and found that profiler’s offender profiles were significantly more accurate than those written by non-profilers, but only for a sex
offence. In the murder case, profilers were not as accurate as detectives without experience, concluding that old fashioned experience may be more important than training in psychological profiling (Oleson 1996). Oleson also points out that the FBI’s methodology may be fundamentally flawed as there is no control group against which to compare evidence from offenders, no mention of statistical techniques used to analyse the data and a lot of the interview data is accepted at face value, when offenders could be playing the system and manipulating it.

There are however some strengths to offender profiling, as Canter claims that the British approach is more scientific because it uses psychological theories and methodologies, ‘showing how and why variations in criminal behaviour occur’ (Dwyer 2001). It highlights differences between the behaviours of criminals and consistencies within the behaviour of individual offenders. Ainsworth also points out that the US ‘crime scene analysis’ has been very influential as it has been successfully used in other countries e.g. Canada and the Netherlands. It helps the police predict the level of violence and the timing of future crimes. Douglas (1981) conducted a review for the FBI on the costs and benefits of profiling. He found that although in 192 cases the suspect was identified using profiling in only 15, in 77% ‘it helped to focus the investigation’. In general the procedures used in profiling improve thoroughness and save many days work in narrowing down suspects.
Decision Making of Juries

A jury is a panel of 12 people from different backgrounds who decide the guilt of the defendant after listening to the court case. A random sample of people aged 18-70 is taken. Psychologists are interested in their decision making as it could establish the factors e.g. characteristics or conformity that influence their innocent/guilty verdict. It is forbidden by law for psychologists to study real juries in the UK, so other methods have been used.

Mock juries are a group of participants given a summarised case and asked to make judgements based on it, and the participants are usually students. Variables such as the characteristics of the defendant can be controlled, however the group may not be representative of a randomly selected jury, scenarios may not be as complex as those in reality and the situations lack consequences – they are not true to life (lacking ecological validity). The method is however legal and behaviour can be looked at in a controlled environment to see what factors are influencing decisions.

Shadow juries may be used, who are eligible for jury service and sit in the public gallery to hear evidence of a case. The discussion of their decisions is recorded. This method is also legal and there is a cross-section of society as they are all eligible for jury service; however they are not the actual jury so they have no influence on the outcome of the case, and recorded conversations alone may not be enough to determine why the participants made their decisions. Post-deliberation interviews may also take place with the jurors themselves and other members of the court, making it more valid as it relates to real juries however the process leading to the decisions is unknown.

The majority influence may have an impact on the decision making of juries, and this is where a larger number of people influence the decision of a smaller number of people. Many believe that if a larger number of a group think something is correct, maybe it really is correct, and the minority feel anxious and conform to reduce their uncomfortable feelings. Asch showed that people are prepared to conform to a group opinion in a non-ambiguous situation even though they disagreed so they did not come across as deviant, suggesting this could occur in a jury when their decisions are being made, causing significant concern for the judicial system as true judgements from each juror are not coming across. Hastie et al found that a jury’s final verdict reflected the view held by the majority of jurors prior to deliberation (86% if the final decision was innocent, 90% if guilty). This effect arises because an individual whose opinion differs from the majority tends to conform, supporting Asch’s study.

Group polarisation may occur in juries as a result of majority influence, where group decisions become more extreme than the average of members at the outset, following group interaction. If the majority all favour one side of the argument, discussion will lead to the group agreeing more strongly with this. Myers and Kaplan found decisions became more lenient or harsh after discussion, but this did not occur if cases weren’t discussed – there was no opportunity for majority influence to take place.

Smith and Mackie suggested a number of factors for why the majority position is so powerful. When the majority are giving their opinion they have a larger number of varied arguments, and Hintz and Davis state that in a jury situation, the minority are likely to be persuaded by arguments they had not thought of themselves, causing them to be swayed by the majority view. Majority arguments tend to be discussed for longer which could be another reason why it has such a great influence. One study set up a scenario where one member of a group received information that the rest were unaware of, and other members were given shared information. The shared information was discussed the most despite all information was
asked to be discussed, almost excluding the individual with the non-shared information (Stasser and Stewart).

Minority influence has also been investigated. Moscovici argued that Asch had put too much emphasis on the idea of the majority having a large influence on the minority. According to Moscovici it is also possible for the minority to influence the majority. He demonstrated the minority influence in a laboratory situation which was perhaps not representative of what must take place if it were to be successful in a jury. It is not as powerful as majority influence so has fewer implications for the decision making. Another reason why minority influence may have less of an impact is that in Britain a jury doesn’t have to be unanimous for a conviction – a majority agreement would suffice. There is some dispute over what behavioural characteristics contribute to a minority gaining influence over a majority. Individuals must be consistent and flexible, and Nemeth states that when a minority stick to a consistent argument it causes the majority to question their own views and scrutinise the minority view, possibly ending with the majority being persuaded by the minority view. However, they need to be consistent in their opinions over time and willing to discuss why they disagree with the majority rather than being rigid. Larger minorities are more effective than lone dissenters in mock juries (Tindale et al) and increasing numbers have greater effect (Wood et al). Increasing minorities cannot be easily dismissed.

Kalven and Zeizel interviewed 225 criminal juries and compared their initial vote with their final verdict and found 215 opened with an initial majority and 209 of them had a final verdict consistent with this vote. This suggests majority influence is larger during the deliberation phase than minority influence.

The characteristics of the defendant have also been shown to influence judges and juries, which include physical attractiveness and ethnicity. People hold stereotypes that criminals have a certain type of facial appearance, which is believed to be unattractive. Attractive people are likely to be thought of as happy, intelligent and truthful individuals not capable of being criminals. Saladin et al conducted an experiment and found that unattractive men were considered more likely to commit crimes such as murder and armed robbery than attractive men. Attractive people are also more likely to be given more lenient sentences when found guilty, and judges and jurors appear more sympathetic towards them. However, it has been found that if a criminal is perceived as using their attractiveness in the crime for their own gain e.g. fraud, jurors would penalise them for it.

DeSantis and Kayson found that mock jurors recommended harsher sentences for burglary for unattractive defendants. This halo effect (tendency for the total impression formed about an individual to be unduly influenced by one outstanding trait) is strongest for women accused of serious crimes (Quigley et al). Downs and Lyons investigated 1500 real defendants and found attractiveness and amount of fine to be negatively correlated, so perhaps looks do play a part in the sentencing and verdict. Most studies report a relationship between defendant features and jury decisions. Bull and McAlpine suggest this might reflect a publication bias; studies finding no effect on judgements tend not to be published as they do not support pre-existing theory.

The ethnicity of the defendant may also affect the decision making of the jury, which links to prejudice and racial stereotyping. In a National Survey it was found that prior to the OJ Simpson trial 77% of white respondents thought the evidence against him was fairly strong whereas 45% of black respondents thought this. It is likely that we are more likely to identify with those from our own race which may explain these results. The ethnicity of the victim may also affect the outcome. Henderson and Taylor found the defendant was more likely to receive the death penalty if the victim was white. Pfeiffer and Ogloff found
white participants were more likely to judge a black than white man guilty in a rape case; supporting the view that race affects decisions, possibly based on prejudices. Baldwin and McConville found black defendants were more likely to have been wrongly convicted than wrongly acquitted even if members of the jury were black. However, Mazzella and Feingold found no overall effect of ethnicity on mock jury decisions of guilt/innocence, contrary to studies who found ethnicity had an effect.

The type of crime may interact with other variables such as ethnicity. Gordon et al varied the type of crime with the ethnicity of the defendant and found that a white embezzler received a significantly longer sentence than the black embezzler, but when the crime was burglary the situation was reversed. This suggests that jurors have racial stereotypes and as such hold some groups more accountable for their actions.

Overall, many factors can influence the decision making of juries. Lawyers and judges rely on theories put forward by psychologists. However much of this research is contradictory and lacks ecological validity as it takes place in an artificial environment.
Theories of Crime

Forensic psychology proposes many theories for crime, both biological and psychological, which support the nature/nurture debate respectively; however the amount of influence either has is a more complex issue.

One explanation is genetics, and twin and adoption studies have taken place to establish whether criminal behaviour is related to our genes. There have been a few large scale studies conducted into concordance rates for criminal behaviour for Dizygotic and monozygotic twins – the largest involving 50 pairs of MZ twins. On average the concordance rate for MZ twins is 55% compared to only 17% for DZ twins, according to Bartol. This suggests that genetics are a factor in criminal behaviour as the concordance rate between identical twins was higher than non-identical twins who do not share as much genetic information; however the concordance rate was not 100% so other factors besides genetics could be influencing crime e.g. environmental factors, such as where you were brought up.

There are however problems in taking an average from several other studies, as different people have different opinions on what the definition of crime is. One contributing study defined traffic violations and military offences during the war as criminal behaviour; however others may not have considered this a crime, reducing the validity of comparing studies. The misclassification of MZ and DZ twins is also an issue, as if the twins are wrongly labelled and the concordance rate alters it is giving a false impression of the importance of genes.

Mednick et al conducted research into adoption studies using court records of a small country between 1927-47 using 14,000 adoptees. The biological and adoptive parents were investigated and the researchers recorded their findings. The conclusions that can be drawn from Mednick et al’s study is it is possible that if your biological parents have a criminal record, this increases your chances of having a criminal record yourself – suggesting genetic influences are at work. If adoptive parents also have a record this increases the percentage of sons with a record, suggesting a mixture of genetic and environmental influences, however there isn’t a finding of 100% of sons with a criminal record so it is unknown what exactly causes people to commit crime in any of the situations investigated.

A strength of this study is that thousands of adoptees were investigated, so results gathered aren’t from a small sample making it easier to generalise findings to other adoptees. Both biological and adoptive parents were studied so results can be compared to see the effect of genetics and environment on the likelihood of criminal acts. However, only one small country’s records were used and the country may have particularly high/low levels of crime, so it may not be a fair representation of countries worldwide. Daughters were not used in the study, only sons, so gender may be having an influence so results cannot be applied to women as well as men. It must also be noted that records of court cases were used, so these people were tried for criminal acts known to the authorities, however it is quite possible that they had done more crimes and had not been caught, meaning it may not be a valid measure of criminality.

Physiological and chemical factors are part of the biological explanations, and these ideas are based around the theory of abnormal brain functioning or neurotransmitter levels causing changes in behaviour, possibly leading to criminal activity.

Neurochemicals such as serotonin have been associated with a lack of control which could lead to anti-social and criminal behaviour. Low serotonin turnover is linked to aggressiveness according to Valzelli, and Virkkunen et al found violent offenders also had low serotonin turnover. It also makes it more likely for
people with low serotonin turnover to commit further violent crimes on release from prison. However, Brunner et al studied a family, many of whom were aggressive. Their behaviour was linked to a mutation of a gene which helps with serotonin turnover, but since the mutation was associated with a lack of the enzyme required to break down serotonin, logically it should have produced a reduction rather than increase in aggression as the serotonin could not be broken down, which is contradictory evidence to Virkkunen et al’s study.

Testosterone has also been associated with aggression. Research such as Dabbs et al found that male prisoners who had committed a violent crime had higher testosterone levels than non-violent criminals, and Dabbs and Hargrove found the same relationship in female prisoners, suggesting hormone levels are a key factor in criminal behaviour. However, much of the evidence supporting the biological theory offers only relatively weak patterns, suggesting other factors like the environment also matter. So, although there does appear to be a genetic influence on criminal behaviour it is not a complete explanation. It is however also possible that there are more ‘criminal’ genes that need to be discovered, therefore strengthening the biological argument.

Certain areas of the brain have also been implicated in the control, or lack of control of behaviour, so damage to these areas or impaired functioning could increase the likelihood of criminal tenancies. Raine researched the brains of criminals using a PET scan and found that there was a lack of prefrontal activity. Another study of 2000 criminals in Canada found minor damage to frontal or temporal regions.

As well as biological theories, there are also psychological theories of crime. Bowlby proposed that children have a biological need to attach to one person and they are pre-programmed to make such an attachment. According to Bowlby the bond developed with their mother (or main caregiver) is a very special one, and is referred to as monotropy. If the bond doesn’t form during the child’s critical period (7 months to 3 years) it is unlikely to ever form and can cause problems for attachment in the future. Maternal deprivation – failure to develop the bond or separation – can lead to delinquent behaviour. He proposed affectionless psychopathy which arises from deprivation, where the key symptoms are a lack of empathy and inability to feel guilt – factors which may increase the likelihood of becoming involved with crime. Bowlby conducted the ‘44 juvenile thieves’ study, and found that 14 out of the 44 had affectionless psychopathy and 12 experienced prolonged separation from their mother in the first two years, so it can be concluded that young criminals with prolonged separation in their first two years were several times more likely to exhibit affectionless psychopathy than those with no separation, providing strong support for Bowlby’s maternal deprivation hypothesis. However this is correlational data and only shows a relationship between these two variables. Other external variables, such as diet, parental income, education etc. may have affected the behaviour of the 44 thieves, and not, as concluded, the disruption of the attachment bond. Bowlby’s Maternal Deprivation is however supported by Harlow’s research with monkeys. He showed that monkeys reared in isolation from their mother suffered emotional and social problems in older age. The monkeys never formed an attachment and so grew up to be aggressive and had problems interacting with other monkeys, however this study was conducted using animals so should not be applied to humans. Although Bowlby found support for his maternal deprivation hypothesis, his research has been criticised for its reliance on retrospective data as it may be confused and not as accurate, reducing the validity. It is also possible that he may have been subjective in the interpretation of his findings.

Bandura’s social learning theory may also offer an explanation for criminal behaviour. This suggests learning occurs when one individual, the learner, observes and imitates another, the model. According to Bandura the observer must pay attention, remember and be able to reproduce what they have observed
and be motivated to do so. The motivation can be external or internal, and external motivation is from direct reinforcement such as the gains from theft, or from vicarious reinforcement (seeing a model benefit from the behaviour). Internal motivation may be from identifying with a model, e.g. in Bandura’s study children were more likely to imitate same-sex models. It must be noted that there may be other factors other than models that determine which specific acts will be imitated as boys in the study were more aggressive than girls, and girls were more likely to imitate verbal aggression; boys physical aggression.

The theory has implications for the portrayal of violence on TV and in video games and has become an increasingly popular debate. Anderson et al aimed to investigate the effect of playing violent video games, and found those who played the violent video game showed the most aggression. It was concluded that playing violent games increases aggressive behaviour, perhaps by encouraging aggressive thoughts (Dwyer). The researchers speculated whether the effect is stronger than watching violent TV programmes because of the active participation of the player which could potentially affect players’ ‘basic personality structure’ so they become more aggressive. This study is supported by Williams who found that physical and verbal aggression levels of children after the introduction of TV in a Canadian town almost doubled. However, Charlton et al found no increase in antisocial behaviour following TV introduction on a small island suggesting the opportunities for social learning do not necessarily lead to negative behaviours. One application of the findings on social learning theory is the importance of regulating children’s exposure to models – implemented through the introduction of the TV watershed at 9pm as well as video game and film age certificates.

There may however be no relationship at all between the media and violence, as Hagell and Newburg compared TV and video habits of 78 young offenders with a school control group. They found the delinquents reported watching no more violent TV and having fewer VCRs. They also had more difficulty naming a favourite character to emulate, suggesting it may not be the media after all that is affecting criminal behaviour, however it must be recognised that it is quite possible that the young offenders in prison watched a lot more violent TV prior to being put in prison so the media could still have influenced their behaviour.
Factors Affecting the Accuracy of Eye-Witness Testimony

If you witness a crime you may be asked by the police to give an account of exactly what you saw. This enables them to ascertain what occurred and to draw up a list of suspects. There are a number of factors that may affect the reliability of eye-witness testimony, including Bartlett’s theory of reconstructive memory, face recognition and the use of language during questioning of witnesses.

In 1932, Bartlett proposed that memory was not completely accurate, but built from fragments of memory, our own experiences, beliefs and expectations. He used the term ‘reconstructed memory’ to describe this. It was suggested that we often change our memories so they make more sense to us, affecting the accuracy of our memories and therefore reducing the reliability of any eye-witness accounts given for a particular incident.

Participants were instructed to recount the details of an American folk tale called ‘War of the Ghosts’, and Bartlett noticed that each person recalled it in an individual way and that the passages got shorter. People seemed to alter or omit parts of the story that didn’t make sense to them. If memory is so easily distorted by our existing schema (cluster of related facts based on previous experiences used to generate future expectations), this poses great problems for the reliability of EWT.

In a study by Carmichael et al, participants were shown a set of drawings along with a description. There were two sets of participants and one set was given a different description for each picture to the other. When the participants were asked to recall the drawings, the description given affected the drawing they produced. This shows that the language used affected the memory, so here the memory was affected by the schema provided. However, it is questioned whether schema alter our initial perceptions or whether they alter our recall. Bartlett assumed that it was the retrieval process that was affected by schema but subsequent research as shown that initial comprehension and storage are also affected.

Stereotypes are usually simplistic schema that we have about a particular group of people, and such stereotypes often affect our recall of events. In a study by Allport and Postman, there were two men (one white, one black) arguing on a train, and when participants were asked about a razor they invariably remembered it being held by the black man, when it was actually held by the white man. Bartlett’s results also suggest we tend to recall in stereotyped ways. Tuckey and Brewer found people shown videos of a bank robbery recalled features fitting their stereotypes the best, e.g. the robbers are male. However, counter-stereotyped information was also well remembered e.g. the belief that robbers carry guns was contradicted.

Eye-witnesses are often required to identify individuals at a crime scene, in particular their faces, so facial recognition is very important. In 1969, Lazslo Virag was convicted of being the ‘Gunman of Liverpool’ after being picked out of an identity parade by eight people including a policeman who swore it was him. A few years later the real man admitted his crime, so the eye witnesses had identified the wrong man. Due to this mistake, and the fact EWT was the sole reason for so many convictions during the 1970s, face recognition became a topic of massive public interest. In 1976 the Devlin Committee investigated all identification parades held in England and Wales in 1973 and found that 45% of ID parades led to the suspect being identified and 82% of those identified were later convicted. However, less weight is given to single EWT since the Devlin Report as other pieces of evidence are required to support it to reduce the amount of suspects being wrongly convicted.
Photofit was a past system involved with face recognition, and Ellis et al studied the effectiveness of such a system. Results indicated that this was not a very good way of forming representations of the face, and people have difficulty reproducing likenesses of even familiar faces. Photofit has the inherent belief that we process local features (e.g. the nose) individually, but do we? Faces are thought to be processed configurally, which can mean the spatial relationships between features are as important as the features themselves, the face features interact with each other, and faces are processed holistically (as a whole). Ellis et al also found that hair style and the outline of the face were more important for unfamiliar faces, whereas internal features like the eyes mattered more for familiar faces. This is probably because features like hair and face shape are relatively invariant whereas our eyes are constantly changing.

Young and Hay aimed to investigate whether we use individual features or holistic processing when recognising faces. They cut photos of faces in half and then realigned the halves from two from another person. If the two halves were aligned very accurately, recognition of the two contributing faces was very difficult, whereas if they were misaligned, recognition was considerably easier. If we recognised faces via individual features, how well they were placed with other’s features shouldn’t matter. As it did indeed affect recognition, Young et al concluded we use holistic processing to recognise faces, and suggested when two halves are aligned carefully to form a composite face, a whole new image is produced. This suggests that Photofit is not a reliable method of asking people to recreate a face they had seen in a crime.

Today, EWT involves the E-FIT system, and this uses computer graphics as an electronic version of the Photofit pictures. Features are selected and put together to build an overall image of a suspect, and the selection of individual features is appropriate, however the E-FIT is flexible and allows subtle changes to be made to the image, making a more holistically accurate picture which is more reliable than Photofit, so witnesses can construct a better image of a suspect, hopefully leading to less cases of mistaken identity.

Language, specifically the use of leading questions, can also affect EWT reliability. Loftus and Palmer conducted a study into this topic and found that leading questions can distort memories for events, and the verb used in the question can alter participants’ perceptions of how fast the cars were travelling in the video when the incident occurred.

A later study by Loftus and Zanni showed how EWT is open to distortion. Questions like ‘did you see the broken light?’ or ‘did you see a broken light?’ were asked, and twice as many people answered yes to the ‘the’ question than the ‘a’ question, suggesting that the wording of questions can lead witnesses to believe they had seen something that was not there. This study suggests that memories can be transformed by deleting and replacing information so events that occurred can be forgotten, and events that didn’t occur are ‘recalled’ – a false memory.

Criticisms of these studies however say that they only focus on peripheral details that might not be hugely important to the case, and they lack ecological validity, as watching a video is nothing like witnessing a real crime because there is a lack of emotion or willingness to concentrate on events as it is a video rather than an unexpected incident. Yuille and Cutshall conducted a study into real-life events and found that it is much more difficult to distort people’s memories for actual events, further supporting the view that Loftus’ study lacked ecological validity. The participants were also all students and therefore not representative of the general population so people in different age groups may be better at remembering information more accurately as events unfold. There are strengths to this research however, as it was well controlled so findings are reliable and there are important applications of this research in the use of EWT to aid the police with their investigations in order to narrow down suspects.
As a final comment we must remember research into memory in general as false memories are where the witness truly believes they have an accurate recollection of events, however time since the memory was formed, expectations, schema and stereotypes may all produce an eye-witness account that is unreliable so the police and CPS should exercise caution when giving weight to the use of EWT in criminal cases to prevent wrongly convicting an innocent person via mistaken identity or jeopardising the investigation by giving false information.
Treatment and Punishment of Crime

Modern prisons make use of psychological principles in the rehabilitation of prisoners. Some are based on cognitive psychology. Cognitive skills programmes are based on Cognitive Behavioural Therapy (CBT) as they aim to identify correct cognitive deficits which lead to criminal behaviour e.g. problems with impulsive behaviour, poor moral reasoning skills or irrational or illogical thinking.

The first task is to help the offender recognise their cognitive deficits and help them change their thinking through acquiring cognitive skills. Enhanced Thinking Skills (ETS) and Reasoning and Rehabilitation (R&R) programmes are used in English and Welsh prison systems. ETS works by asking offenders to attend group work sessions that are compulsory, and skills include learning to think before acting, e.g. using techniques to ‘consider all factors’ and ‘plusses, minuses, interests’. Group exercises demonstrate the value of stopping and thinking to help their understanding of consequences. R&R works by forming small groups, and each session teaches sub-skills building on previous learning. This is based on offenders being typically under-socialised, lacking values, attitudes, reasoning and social skills needed for appropriate behaviour in society. Problem solving, social skills, emotion management and creative thinking are examples of modules covered.

CBT programmes are seen as being desirable as they do not simply punish prisoners but can rehabilitate them and change thinking patterns. This makes it a more ethical treatment and also protects society more. Recidivism rates are lower amongst prisoners who have undergone ETS or R&R programmes. Hollin et al found male offenders in treatment groups reoffend less than controls when a review took place by the probation service in England and Wales. However, some find a greater benefit from one treatment over the other, as Cann et al found that ETS was effective but R&R was not, and also found the benefits may not be very long term as the advantage of treatment had been lost after two years of being released. Palmer et al found that CBT programmes may only work with medium and high risk offenders, but one may argue these are the people the programmes were designed for and we want success from these particular offenders.

It is worth noting that reduced reconviction applies only to those who complete the programmes; none-completers are more likely to be reconvicted and are also more likely than controls to be reconvicted as well (Palmer et al). A possible explanation is those who fail to complete the course have the most deviant thinking so are most in need of help but least able to benefit.

There may be gender bias involved with these treatments as ETS and R&R were developed with male prisoners in mind. Recidivism rates for women have not been reduced after using these programmes, as although the wording of the materials was changed, the content remained the same. Cann et al suggests the findings may alternatively be due to the absence of cognitive deficits related to crimes committed by women or because the samples were mostly low-risk individuals as opposed to medium or high risk.

Another treatment programme is based on behavioural psychology. Operant conditioning underlies token economy, a treatment used to improve prisoners’ behaviour. Good behaviour e.g. being non-aggressive can be reinforced by giving tokens to them. They should be given immediately and consistently for clearly defined behaviours. Tokens can be exchanged for privileges e.g. cigarettes or watching TV. Punishment e.g. isolation is also used to reduce the frequency of undesired behaviour. Behaviour can be shaped by successive approximations (small steps) towards the end goal of pro-sociality in prisoners that do not expect rewards for simply behaving in acceptable ways.
The importance of consistency of the token economy is illustrated by Bassett and Blanchard who observed a 3 month programme that failed as it was attributed to staff misuse of the token system, further supported by improvements in prisoner behaviour when consistency was re-established.

Hobbs and Holt found that the use of token economies in a young offenders’ institution dramatically increased appropriate behaviours in the boys and adolescents. In three ‘cottages’ within the institution where a token economy was used, behaviour improved considerably compared to a control cottage where token economy was not used. Jenkins et al followed up male offenders 18 months after release and found that the men that were on the token economy programmes had lower recidivism rates than those on CBT programmes, highlighting the effectiveness of a token economy in comparison to CBT described above, but differences between the control group and groups on the token economy were largely non-significant. Garrido and Morales warn though that more serious criminals are more likely to benefit from CBT than the token economy as recidivism was highest when they had no intervention and CBT programmes were more effective than token economies, so there is conflicting evidence over which is more effective.

The token economy approach has been largely replaced by cognitive treatments as it treats only overt behaviour e.g. aggression rather than the cause of that behaviour which is the intention of cognitive treatments. Like CBT, token economies may only work for motivated offenders, as in reality powerful prisoners may control much more effective reinforcers e.g. offering higher status to other offenders and punishers e.g. bullying than wardens. There are also ethical concerns about token economies as treating adults like children by giving them treats for good behaviour might not fit the image of prison as an empathic place of rehabilitation. For some this is irrelevant as they would believe prison should be for punishment, not rehabilitation.

The Zero Tolerance (ZT) approach to crime is to respond to all crime as it were equally serious. According to Kelling and Wilson, if one broken window is left unrepaired in a neighbourhood it creates a social norm that window breaking is acceptable and there is a downward spiral of crime. A ZT approach suggests this downward spiral can be avoided by tackling minor crime at the outset to prevent it escalating. In New York City, Police Commissioner Bratton used 7000 extra officers to target low level crimes e.g. street drinking, and in a short time period the crime rate dropped 37% and the homicide rate dropped by 50%, appearing to show ZT works however the reduced crime rate may not be due to ZT but the increased police presence in the streets. It should also be noted that crime rates decreased significantly in other states without the ZT policy, suggesting factors such as decreased drug supply across several states (and decreased drug-related crime) were responsible for the reduction. Pollard criticised the New York policy for being too harsh e.g. by harassing citizens by cracking down on non-criminal activities like drinking, which could be detrimental as it alienates the community leading to problems with long-term policing. In support of ZT however, Ulmer et al reported a ZT approach to driving offences in Florida showed large reductions compared to nearby states who didn’t use the approach.

Modern approaches to prison see treatment rather than pure punishment as a goal. This is desirable for many reasons; it helps reduce reconviction rates, may reduce rates of self-harm and suicide in prisoners and may prove less costly if prison populations can be reduced over time. Critics however will always see ZT as the best policy and dismiss any attempt at treatment as an easy way out. The debate continues over which is the better approach.