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   The origins of legal psychology

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Learning Objectives

By the end of this chapter you should appreciate that:

- forensic psychology is informed by research in many other areas;
- research has identified the major influences on the accuracy of eyewitness memory;
- there are major differences between voluntary and coerced confessions;
- interviewers use a variety of techniques to enhance memory retrieval in witnesses;
- it is not straightforward to detect lies and deceit;
- there are factors present during childhood that can predict adult offending, and important influences over the lifespan that help to explain and characterize violent conduct;
- there is a variety of treatments used when working with offenders;
- forensic psychologists work in a similar way to other psychologists.

INTRODUCTION

Crime is part of our everyday lives. Switch on the television and there will be documentaries about crime, films about crime and crime stories in the news. Pick up a newspaper and there will be coverage of local crimes, and articles about crimes of national and international significance. Browse in a bookshop and you will probably find a crime section with novels about crime, true crime stories, books about criminals and books written by criminals. Listen to a conversation on the bus or in the pub and there is a good chance that you will hear someone talk about a burglary in their street, or their car being broken into, or a friend’s credit cards being stolen.

From the time that Cain killed Abel, crime has been in the news. For centuries before psychology appeared on the scene, philosophers struggled to understand evil and antisocial acts, while students of jurisprudence wrestled with issues of criminal law and punishment. It was not until the turn of the 1900s that psychology was first applied to understanding criminal behaviour, and forensic psychology did not really emerge as a speciality until the middle of the twentieth century.

But forensic psychology has quickly grown in popularity, aided and abetted by several well-known television series. University postgraduate courses have expanded to include forensic psychology, and there is now a range of professional opportunities for those with the appropriate qualifications.
PSYCHOLOGY AND THE LAW

THE MEANING OF ‘FORENSIC’

According to The Concise Oxford English Dictionary, ‘forensic’ means ‘Of, used in, courts of law’. So, strictly speaking, forensic psychology is the application of psychology to matters concerning the court of law.

Wrightman’s Forensic Psychology takes just this approach in proposing that ‘Forensic psychology is reflected by any application of psychological knowledge or methods to the task facing the legal system’ (2001, p. 2). This correct usage of the term ‘forensic’ is similarly reflected in other texts given specifically to forensic psychology (Gudjonsson & Haward, 1998) or more generally to psychology and law (Bartol & Bartol, 1994; Kapardis, 1997; Stephenson, 1992).

But ‘forensic psychology’ has also come to be used in a much broader sense – when psychology is associated with any topic even remotely related to crime, such as the development of antisocial behaviour, the study of different types of offender, and crime prevention. This improper use of the term ‘forensic’ has, rightly, met with disapproval (Blackburn, 1996), but its use has become widespread.

In considering the topic of forensic psychology in the broad sense it is helpful to distinguish between legal psychology – which can be thought of in terms of Wrightman’s definition – and criminological psychology – the application of psychological knowledge and methods to the study of crime and criminal behaviour.

THE ORIGINS OF LEGAL PSYCHOLOGY

The application of psychology to the legal arena took place even as psychology first developed as a university-based academic discipline. In their history of forensic psychology, Bartol and Bartol (1999) note that several eminent figures, such as J. McKeen Cattell (1895), Alfred Binet (1905) and William Stern (1910), conducted studies of the accuracy of memory, drawing parallels with the precision of real-life eyewitness testimony. Even Sigmund Freud showed an interest in legal psychology, publishing in 1906 a paper titled ‘Psychoanalysis and the ascertaining of truth in courts of law’.

But there is little doubt that the most influential figure of the time was the American-based German psychologist Hugo Münsterberg (1863–1916). A doctoral student of Willhelm Wundt in Leipzig, Münsterberg met William James at Harvard in 1889, eventually taking a post there in 1897 (Spillmann & Spillmann, 1993). While writing on many areas of psychology, often in a controversial manner (Hale, 1980), Münsterberg’s major contribution to the fledgling discipline of forensic psychology is to be found in his book, published in 1908, On the Witness Stand. He advanced the view that psychology could usefully be applied to enhance understanding of courtroom issues and procedures.

In particular, Münsterberg drew attention to the psychologist’s understanding of perception and memory, claiming that psychological knowledge provided insight into the reliability of witness testimony (thereby making the case for the psychologist as expert witness). At the time, Münsterberg’s claims for the practical benefits of psychology in the courtroom drew fierce attack from the legal profession (Wigmore, 1909). But his writings have stood the test of time in anticipating important areas of research, such as the study of the reliability of evidence, as seen in investigations of eyewitness memory and confessional evidence.

EYEWITNESS MEMORY

AN EARLY MODEL OF MEMORY

The capacity and fallibility of human memory was one of the first areas of investigation in psychological research (see chapter 11). Through careful experimental work, several distinguished scholars, including Hermann Ebbinghaus (1850–1909), began to unravel
some of the fundamental properties of memory functioning (Ebbinghaus, 1885/1994). One model that emerged from this early work described the three memory stages of (i) acquisition (when memories are formed), (ii) retention (holding them in storage) and (iii) retrieval (fetching them from storage).

While memory theory has moved on from this basic model, it is still useful in a discussion of eyewitness memory. Researchers have engaged with a wide range of relevant variables over a long period (Goodman et al., 1999; Ross, Read & Toglia, 1994; Sporer, Malpass & Koehnken, 1996), including:

- social variables, such as the status of the interrogator;
- situational variables, such as the type of crime;
- individual variables, such as witness age; and
- interrogational variables, such as the type of questioning.
Acquisition

Research has also considered the effect of particular types of crime. For example, can witnesses to a violent crime be as accurate as witnesses to a non-violent crime? Controlled experimental studies, typically during which witnesses see videotaped crimes of varying degrees of violence, suggest that violence results in poorer witness accuracy (Clifford & Hollin, 1981). But strangely, field studies of real-life witnesses suggest that those who are exposed to highly violent events can give very accurate testimony (Yuille & Cutshall, 1986). Indeed, adult victims of rape usually give a reasonably accurate account of this extreme personal experience of violence (Koss, Tromp & Tharan, 1995).

One possible explanation for this apparent contradiction is that, in a stressful situation such as a violent crime, a witness’s attention may narrow to the central (rather than the peripheral) details of the incident. The theory is that the deployment of attention narrows to central details of the event, such as the criminal’s actions, thereby producing less reliable memory for peripheral detail, such as what colour shirt the criminal was wearing (Clifford & Scott, 1978). When the central detail is a life-threatening weapon, witnesses may pay much more attention to the weapon, to the exclusion of other details. This phenomenon is known as ‘weapon focus’ (Loftus, Lofus & Messo, 1987).

It is vital to understand the impact on witness memory of factors such as the type of crime. What is encoded during acquisition is critical because it forms the basis for what is stored in memory and eventually retrieved when giving testimony.

Retrieval

Finally, during the retrieval stage, factors that potentially influence the accuracy of eyewitness testimony include interview style and the use of aids to recall, such as the photofit and identity parades (see also chapter 11).

Studies of the impact of leading questions show that even subtle changes in question wording can influence testimony. For example, Loftus and Palmer (1974) asked witnesses to a filmed traffic accident to estimate the speed of the cars when ‘they – into each other’, for different groups of witnesses the blank read ‘contacted’, ‘hit’, ‘bumped’, ‘collided’ or ‘smashed’. The witnesses’ estimates of the speed increased according to the level of force implied by the verb contained in the question (table 21.2).

In later questioning, those witnesses who had been asked about the car ‘smash’ were more likely to say – mistakenly – that they had seen broken glass. Additional studies have established that misleading information presented to witnesses is more likely to have an influence on peripheral details than central events (Read & Bruce, 1984). Furthermore, it seems that the effects of leading questions such as those used by Loftus and Palmer (1974) are a direct product of the demands of the questioning procedures, rather than the questions leading to permanent changes in memory (Zaragoza, McCloskey & Jarvis, 1987). This last point emphasizes that witnesses can give incorrect replies to questions even though the memory trace (‘retention’) itself has apparently not been distorted.

Table 21.2 Speed estimates of collision in response to different forms of question wording.

<table>
<thead>
<tr>
<th>Question, with different words used in place of the blank</th>
<th>Average speed estimates (miles per hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘About how fast were the cars going when they – each other’?</td>
<td></td>
</tr>
<tr>
<td>contacted</td>
<td>31</td>
</tr>
<tr>
<td>hit</td>
<td>34</td>
</tr>
<tr>
<td>bumped</td>
<td>38</td>
</tr>
<tr>
<td>collided</td>
<td>39</td>
</tr>
<tr>
<td>smashed</td>
<td>41</td>
</tr>
</tbody>
</table>


decrease with time, although the rates for false and correct identifications may be different.

The Strength and Validity of the Evidence

Narby, Cutler and Penrod (1996) have created three categories of witness-related evidence based on reliability and magnitude of effect:

Table 21.1 The effect of delay on face recognition.

<table>
<thead>
<tr>
<th></th>
<th>Short delay</th>
<th>Long delay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct IDs</td>
<td>83%</td>
<td>36%</td>
</tr>
<tr>
<td>False IDs</td>
<td>0%</td>
<td>35%</td>
</tr>
</tbody>
</table>

Source: Based on Malpass and Devine (1981).
1. reliable and strong factors that show consistent effects on eyewitness memory (e.g. there are differences in memory performance between adult and child witnesses; if a person is wearing a disguise, such as a hat, this influences accuracy of memory; and the length of time, termed ‘exposure duration’, that the witness has to observe an incident); 
2. reliable and moderate factors that show effects in some studies but not in others (e.g. the match between the level of confidence a witness has in their memory and how accurate it really is; weapon focus; and crime seriousness); and 
3. weak or non-influential factors that have little or no effect on witness accuracy (e.g. witness gender; the personality of the witness; and (within limits) the witness’s level of intelligence).

An issue that is broader than the strength of the evidence concerns its validity when applied to the real world. Do the findings from psychological studies parallel what happens to real crime witnesses? Should research findings be made available to the court to influence real trials? In other words, can psychological studies of eyewitness memory be generalized to real life?

Critics such as Konecni and Ebbesen (1986) and Yuille and Cutshall (1986) note the lack of realism in many experimental studies, such as the use of filmed crimes, and the participants’ awareness of the research aims. The matter boils down to one of control – laboratory studies allow a high degree of control at the expense of realism, while field research is more realistic and ‘ecologically valid’ but prey to a host of influences that reduce control over the variables being measured. This is a problem
which has bedevilled many areas of psychological research but its influence is arguably no more profound than in the field of forensic psychology.

The strongest conclusions that can be validly drawn will most likely be derived from a variety of studies (including laboratory studies, case studies, field studies and archival studies) which employ a broad range of different experimental designs and methodologies (see chapter 2 on ‘triangulation’).

**THE PSYCHOLOGY OF CONFESSION**

In law, a confession is exceptionally powerful evidence – an irrefutable admission of guilt. But while most confessions are true, some people have been known to ‘confess’ to a crime they did not commit. Gudjonsson (2003) offers a catalogue of cases in which people have been imprisoned for long periods, or even executed, on the basis of a false confession. In the UK these infamous cases include those of the ‘Guildford Four’ and ‘Birmingham Six’, two court cases from the mid 1970s, in which four and six innocent people respectively received long prison sentences based on evidence that included false confessions. How often such cases arise is impossible to know – matters of guilt and innocence are not always clear-cut, and the discovery of a mistake in sentencing can take years to come to light. Undoubtedly, some such errors never do.

Why people make false confessions, another issue raised by Münsterberg (1908), is a very ‘psychological’ question. A distinction has been drawn between two types of false confession – voluntary and coerced. Coerced false confession can be broken down further into two sub-types – coerced-compliant and coerced–internalized false confessions.

**VOLUNTARY FALSE CONFESSIONS**

A voluntary false confession occurs when, in the absence of any obvious external pressure, an individual presents himself to the police and admits to a crime he did not commit. Kassin and Wrightsman (1985) suggest several possible reasons for this behaviour:

1. the desire for notoriety – it is a feature of many high-profile crimes that substantial numbers of people come forward to confess;
2. the individual may feel guilty about a previous event in his life, and believe he deserves to be punished;
3. inability to distinguish between fact and imagination, so internal thoughts of committing a crime become ‘real’ (this type of behaviour is often associated with major mental disorders such as schizophrenia);
4. the desire to protect someone else, such as a child or partner (this type of false confession can be coerced as well as voluntary).

Gudjonsson (2003) notes revenge as another motive that can lead to a false confession. In one case, a man made a false confession deliberately to waste police time as revenge for what he perceived as his previous wrongful treatment by the police.

In contrast to voluntary false confessions, the essential element of a coerced confession is that the individual is persuaded to confess. As Kassin (1997) suggests, to understand coercion within the context of a false confession, it is necessary to begin with the process of police interrogation.

**INTERROGATIONAL TACTICS**

The laws relating to the conduct of police interrogation of suspects vary from country to country. But there are some psychological principles that can be applied whenever one person is seeking information from another, irrespective of location.

Suspects may spend time isolated in police cells before and during interrogation, an experience that can be frightening and stressful (Irving, 1986). For some, this situation may create psychological distress or exacerbate existing psychological and emotional conditions. Police interrogation manuals from both Britain (Walkley, 1987) and America (Inbau, Reid, & Buckley, 1986) tell us that, from a police perspective, the interrogator must overcome the suspect’s natural resistance to tell the truth, and so must be skilled in the use of strategies to persuade the suspect to confess. These interrogational tactics, based on the social psychology of conformity, obedience and persuasion (see chapter 18), increase the pressure on suspects so that they will fall into line with the
interrogator’s view of events. The interrogator will do this by suggesting that they have the power to determine what charge will be brought, whether the suspect will receive bail or be remanded in custody, and whether to involve other people known to the suspect. The interrogator might also use persuasive tactics designed to encourage the suspect to confess, suggesting, for example, that there is evidence proving the case against the suspect, or that accomplices have confessed, or even, as Gudjonsson and MacKeith (1982) noted, by producing dummy files of evidence.

More recently, there have been various legal changes in the rules governing the conduct of interrogations to eliminate dubious practice (Gudjonsson, 2003). There is guarded optimism that the changes are having the desired effect. But in such a highly charged and complex arena, where there are often pressures on the police to solve a high-profile crime, it can be difficult to be certain of how the minutiae of social exchanges during interrogation influence the final outcome.

**Coerced false confessions**

Gudjonsson and Clark (1986) suggested that a suspect will come to an interrogation with a general cognitive ‘set’ that may be hostile, suspicious or cooperative. This cognitive set (itself related to factors such as intelligence, level of stress and degree of previous experience of police questioning) will influence the suspect’s appraisal of the situation, and so affect the suspect’s strategy for coping with the interrogation.

Gudjonsson and Clark describe two styles of initial coping response:

1. a logical, realistic approach, which seeks actively to deal with the situation and may lead to active resistance (which may weaken as the interrogation progresses) to the interrogator’s persuasion to confess; and
2. a passive, helpless stance, which avoids confrontation with the interrogator, and so reduces stress but may lead to increased suggestibility to the interrogator’s persuasive tactics.

During questioning, the suspect has to recall information, but she must also make some difficult decisions. She has to decide how confident she is in her memories, what answer to give the interrogator (which may not be the same as the suspect’s private knowledge of events) and whether she trusts the interrogator. Resistant suspects are likely to hold onto their own version of the truth, rebutting persuasive attempts to bring them to confess. Coerced suspects may change their version of the truth so as to agree with the interrogator.

Where a false confession ensues, this process of coerced agreement can be seen in two distinct ways:

1. The suspect remains aware that her confession and her private, internal knowledge of the event disagree, but the suspect nevertheless comes to agree with the interrogator. This is called a coerced-compliant false confession.
2. In some circumstances, the suspect’s internal account of events actually changes to fall into line with the interrogator, so that, both publicly and privately, the suspect comes to agree with the interrogator’s version of events. This is called a coerced–internalized false confession.

**Coerced compliance**

The notion of compliance has a long history in psychological research (Asch, 1956; Milgram, 1974; see also chapter 18). The compliant suspect copes with the pressures of interrogation by coming to agree with the interrogator (even while knowing that the agreement is incorrect, in the case of the coerced–compliant false confession). This might happen for several reasons: the suspect might wish to please the interrogator, avoid further detention and interrogation, avoid physical harm (real or imagined) or strike a deal with the interrogator that brings some reward for making a confession (Vennard, 1984).

**Coerced internalization**

The essential element in a coerced–internalized confession is the suspect’s coming to believe that their own memory for events is incorrect and that the police version must therefore be true. Kassin (1997) has drawn the analogy between this type of confession and the phenomenon of false memories (see chapter 11). There are perhaps also parallels with the notion of cognitive dissonance, discussed in chapter 17 (whereby a person comes to change their attitudes to make them more consistent with their behaviour) and the kind of obedience which occurs towards authority figures (discussed in chapters 1 and 18) may well also be relevant here.

Drawing on the psychology of suggestibility (Gheorghiu et al., 1989), Gudjonsson (1987) developed the notion of interrogative suggestibility – the extent to which, during intense questioning, people accept information communicated by the questioner and so change their responses. The powerful combination of situational stress, individual factors such as self-perception, intelligence and memory ability, and current psychological state may trigger suggestibility to misleading information on the part of the suspect, and so produce a false confession.

**The Psychology of Investigation**

**The cognitive interview**

Interviews are one of the most common ways of gathering information across a range of settings for a variety of reasons (Memon & Bull, 1999). In the context of crime investigation,
information was encoded, the witness should have facil-
itated access to stored memories, improving the accuracy
and completeness of recall (Fisher et al., 1994).

3. Reverse order – the witness is encouraged to begin their
description of an event from different starting points (such
as a mid-point), or to start at the end and work backwards
to the beginning.

4. Change perspective – witnesses are encouraged to give
an account of the event from the point of view of another
person, such as another witness or the victim.

Techniques 3 and 4 are intended to encourage witnesses to try
to use many different paths to retrieve information from mem-
ory. If memories are stored as networks of associations, increas-
ing the number of retrieval points should lead to more complete
recall of the original event (Fisher et al., 1994).

As the research and practice base developed, so the protocols
for the cognitive interview expanded to include, for example, a
broader range of specific questioning techniques and the use of
guided imagery (Fisher & Geiselman, 1992).

A body of evaluation studies, conducted in both laboratory and
field settings, has accumulated since 1984. According to Milne
and Bull (1999), the weight of evidence shows that the cognitive
interview elicits more correct (that is, truthful) information than
other types of interview. While there are some reservations, the
technique is generally well received by police officers and has
become widely used. Furthermore, recent research suggests that
it is a reliable and helpful technique with child witnesses (Milne
& Bull, 2003).

DETECTING LIES AND DECEIT

How easy is it to tell when someone is telling lies and seeking to
deceive? (See also chapter 6.) Kassin (1997) cites several examples
taken from police training manuals that suggest suspects’ verbal
and nonverbal cues can be read to determine if they are lying.
For example, it has been suggested that guilty suspects do not
make eye contact, while innocent suspects give clear, concise
answers.

It is possible that these general rules are useful, but the
empirical evidence suggests that even skilled questioners are not
good at detecting deceit simply on the basis of a suspect’s verbal
suggested that most liars are caught because it becomes too
difficult to continue to lie, and they have not made sufficient
preparation to avoid detection. Vrij lists seven qualities that make
a good liar:

1. having a well prepared story;
2. being original in what is said;
3. thinking quickly when the need arises;
4. eloquence in storytelling;
5. having a good memory for what has been said previously;
6. not experiencing emotions such as fear or guilt while lying
   (see chapter 6); and
7. good acting ability.
If verbal and non-verbal cues are hard to read, how does an investigator catch out an individual who possesses all the attributes listed above? One approach is a highly structured analysis of verbal content, known as Statement Validity Assessment (SVA).

Originally developed as a clinical tool for analysing children's statements in cases of sexual abuse (Undeutsch, 1982), SVA consists of three elements:

1. A statement is taken in a structured interview.
2. The content of the statement is judged by the forensic psychologist in a criterion-based content analysis (CBCA). These content criteria are concerned with the general characteristics of the statement (such as whether it has a logical structure), the specific contents of the statement (such as descriptions of events and people), motivation-related content (such as admission of a lack of memory) and offence-specific elements (concerning the fine details of the offence).
3. The CBCA is necessarily subjective, and needs to be evaluated against a standard set of questions set in the 'validity checklist' (Raskin & Esplin, 1991). This checklist raises questions about the conclusions drawn from the analysis. In other words, the content analysis itself is put to the test by systematic consideration of interviewee characteristics. The interviewee's psychological and motivational characteristics, the characteristics of the interview and a 'reality check' against other forensic evidence are all examined.

It is clear that SVA represents an attempt to bring order and rigour to the essentially subjective matter of judging the veracity and reliability of an interviewee’s statement. However, in a review of the substantial evaluative literature with regard to SVA, Vrij (2000) has expressed several reservations about the technique. He concludes that ‘SVA evaluators appear to be able to detect truths and lies more accurately than would be expected by chance’ (p. 153). In other words, while not a perfect technique, SVA does help improve accuracy beyond guesswork and inaccurate beliefs about how to judge accuracy.

### Offender profiling

Profiling historical and political figures

Attempts have been made to construct psychological profiles of historical figures (from Jack the Ripper to Adolf Hitler) by systematically gathering and organizing information in an effort to understand their motives and behaviour. Experts will undoubtedly have constructed psychological profiles of Saddam Hussein in order to try to predict his behaviour during the 2003 conflict in Iraq. These types of profile typically rely on specialist knowledge (e.g. military, historical).

Profiling criminals from the crime scene

Way back in the late 1880s, forensic pathologists were trying to link series of crimes by the similarity of crime scene characteristics, such as the nature of a victim’s wounds. More recently, the American Federal Bureau of Investigation (FBI) pioneered an investigative system based on central features (such as the details of a crime scene and forensic evidence) in order to construct a profile of the psychological and behavioural characteristics of the criminal (Douglas et al., 1986).

While forensic evidence can yield many clues, the starting point for the FBI was to use the crime scene to construct a picture of the type of person who committed the offence. This approach yields various classifications of types of offender associated with their psychological characteristics.

For example, a much used distinction (mainly concerned with serious offenders such as murderers or rapists), incorporated within the FBI framework, is that between 'organized' and 'disorganized' offenders (Ressler, Burgess & Douglas, 1988). An organized offender will plan the offence, be careful not to leave evidence, and target the victim. The disorganized offender will seemingly offend at random, use a weapon that is discarded near to the scene of the crime, and make few attempts to hide evidence or potential clues. In terms of psychological characteristics, the organized offender is seen as intelligent and socially adjusted, although this apparent normality can mask a psychopathic personality. According to this framework, the disorganized offender is said to be less intelligent and socially isolated, may have mental health problems, and is likely to offend when in a state of panic. The obvious criticisms of such distinctions (and the FBI approach more generally) is that they are inductive, highly subjective and lacking in robust empirical validation.

Profiling common characteristics of known offenders

The third approach to profiling is to look to empirical data, rather than an expert's opinion, to construct profiles. This approach...
emphasizes the rigorous gathering of data about the crime from multiple sources (such as geographical location and victim statements), the application of complex statistical analyses to databases of crime scene details (and other forensic evidence), and attempts to build a profile of the offender with theoretical integrity. Adopting this approach, Canter and Heritage (1990) analysed data from over 60 cases of sexual assault and were able to identify over 30 offence characteristics, such as level of violence, use of a weapon, type of assault and use of threats. Statistical analyses were used to search for relationships and patterns between the factors, and to build up characteristic profiles of types of sexual assault. This and other similar studies provide preliminary support for the central premises of offender profiling based on the common characteristics of known offenders.

**CRIMINOLOGICAL PSYCHOLOGY**

The academic relationship between criminology and psychology has not always been harmonious (Hollin, 2002a). Studies of the first criminologists, in the late 1800s, focused on the individual offender, and it was hard to distinguish between criminologists and psychologists. In the 1930s, the focus in mainstream criminology shifted from the individual to society, and psychological theories of criminal behaviour held little sway compared to sociological theories. But since the 1990s, there has been an increasing dialogue between the disciplines as the study of the individual once again becomes a concern in criminology (Lilly, Cullen & Ball, 2001).

**THE CAMBRIDGE STUDY**

_Predicting delinquency_

One of the main findings from longitudinal research is that most juvenile crime is ‘adolescence limited’. In other words, most young offenders ‘grow out’ of crime by the time they are 18 (Moffitt, 1993). But some juveniles (called ‘life-course persistent’ offenders) will continue offending into adulthood (Moffitt, 1993). Developmental criminology attempts to identify the factors that predict longer-term offending, in turn contributing to preventative efforts.

The Cambridge Study in Delinquent Development is an extensive longitudinal study conducted in Great Britain that has generated a wealth of data (Farrington, 2002). It began in 1961 with a cohort of 411 boys aged eight and nine, and it is still in progress, with over 90 per cent of the sample still alive. The methodology used in the Cambridge Study has involved not only access to official records, but also repeated testing and interviewing of the participants, as well as their parents, peers and schoolteachers.

Approximately 20 per cent of the young men involved in the survey were convicted as juveniles, a figure that grew to 40 per cent convicted (excluding minor crimes) by 40 years of age. The official convictions matched reasonably well with self-reported delinquency. By comparing the worst offenders with the remainder of the cohort, predictive factors began to emerge. These are factors evident during childhood and adolescence that have predictive value with respect to behaviour in later life. The Cambridge Study strongly suggests that the intensity and severity of certain adverse features in early life predict the onset of antisocial behaviour and later criminal behaviour.

Farrington (2002) lists these predictive factors as follows:

1. antisocial behaviour, including troublesomeness in school, dishonesty and aggressiveness;
2. hyperactivity–impulsivity–attention deficit, including poor concentration, restlessness and risk-taking;
3. low intelligence and poor school attainment;
4. family criminality as seen in parents and older siblings;
5. family poverty in terms of low family income, poor housing and large family size; and
6. harsh parenting style, lack of parental supervision, parental conflict and separation from parents.

Other studies have found similar predictors for aggression and violent conduct (Kingston & Prior, 1995). It is also evident that...
childrenhood antisocial behaviour and adolescent delinquency are related to other developmental problems. Stattin and Magnusson (1995) found clear relationships between the onset of official delinquency and other educational, behavioural and interpersonal problems. Farrington, Barnes and Lambert (1996) showed that these developmental problems are frequently concentrated in specific families. In their sample of 397 families, half the total convictions in the whole sample were accounted for by 23 families.

The force of the Cambridge Study and other similar research is to suggest that we need prevention strategies to reduce child and adolescent antisocial behaviour (Farrington, 2002). Such strategies might include improving young people’s school achievement and interpersonal skills, improving child-rearing practice and reducing poverty and social exclusion.

**Adult criminals**

A longitudinal study allows us to compare adult offenders and non-offenders to discover even more about the pathways to crime. When the cohort in the Cambridge Study reached the age of 18, the chronic offenders had a lifestyle characterized by heavy drinking, sexual promiscuity, drug use and minor crimes (mostly car theft, group violence and vandalism). They were highly unlikely to have any formal qualifications, they held unskilled manual jobs, and had had frequent periods of unemployment.

By 32 years of age, the chronic offenders were unlikely to be home-owners, had low-paid jobs, were likely to have physically assaulted their partner, and used a wide range of drugs. As you might expect, they had an extensive history of fines, probation orders and prison sentences. It was clear from their life histories and current circumstances that these men were leading a bleak and socially dysfunctional existence.

The data also point to protective factors. These are factors that appear to balance the negative predictors, so that at times when you would expect offending to occur, it does not. When males show all the predictive signs for a criminal career and yet do not commit offences, Farrington and West (1990) label them ‘good boys from bad backgrounds’. These men were generally shy during adolescence and socially withdrawn as adults. While not involved in crime, they did experience relationship problems with their parents or partners. Forming close relationships in early adulthood also seems to be related to a decrease in offending. In particular, those offenders who married showed a decrease in offending – providing that their partner was not a convicted offender (Farrington & West, 1995).

It would be a mistake to try to construct an exact model of a criminal career from all these data. There are too many unanswered questions for us to be overly confident in predicting the outcome, and simply describing the predictive factors is not the same as explaining how they bring about delinquent behaviour. Thus far, there is no grand theory to explain how the interaction between a young person and his or her environmental circumstances culminates in criminality. However, there are enough positive developments in the extant literature to indicate that this might be feasible in the future, at least with respect to certain probabilities and confidence limits.

**Violent offenders**

Criminal behaviour takes many forms, but there is little doubt that violent acts are a source of great public concern. A recent World Health Report (Krug et al., 2002) referred to violence as ‘a global public health problem’. Contemporary psychological theory characterizes violence in this context in terms of an interaction between the qualities of the individual and characteristics of their environment.

**The development of violent behaviour**

As with delinquency, the development of violent behaviour can be studied over the lifespan, leading to the formulation of complex models of violent conduct. Nietzel, Hasemann and Lynam (1999) developed a model based on four sequential stages across the lifespan (table 21.3). This is an excellent example of an attempt to integrate social, environmental and individual factors to characterize the key factors underlying violence.

At the first stage, there are distal antecedents to violence. These are divided into biological precursors (including genetic transmission and lability of the autonomic nervous system – see chapter 3), psychological predispositions (including impulsivity and deficient problem solving) and environmental factors (such as family functioning and the social fabric of the neighbourhood).

At the second stage, there are early indicators of violence as the child develops, such as conduct disorder and poor emotional regulation. Third, as the child matures the developmental processes associated with the intensification of violent behaviour come into effect, including school failure, association with delinquent peers, and substance abuse.

Finally, as the adolescent moves into adulthood there is a stage at which maintenance variables come into force, including continued reinforcement for violent conduct, association with criminal peers, and social conditions that provide opportunities for crime.

Notice how this approach draws on much of what you have studied in earlier chapters of this book (e.g. chapters 3, 4, 10 and 15).
Forensic Psychology

The role of anger

Cognitions interact with emotions (see chapter 6), and anger (particularly dysfunctional anger) is the emotional state most frequently associated with violent behaviour (Blackburn, 1993). Anger may be said to be dysfunctional when it has significantly negative consequences for the individual or for other people (Swaffer & Hollin, 2001). It would be wrong to say that anger is the principal cause of violence, or that all violent offenders are angry, but clearly it is a consideration in understanding violence.

Currently, the most influential theory of anger is Novaco’s (1975). According to Novaco, for someone to become angry, an environmental event must first trigger distinctive patterns of physiological and cognitive arousal. This trigger usually lies in the individual’s perception of the words and actions of another person.

When we become angry, physiological and cognitive processes are kicked into action. Increased autonomic nervous system activity includes a rise in body temperature, perspiration, muscular tension and increased cardiovascular activity. The relevant

Table 21.3  Suggested developmental sequence in the aetiology of violent behaviour.

<table>
<thead>
<tr>
<th>Distal antecedents</th>
<th>Early indicators</th>
<th>Developmental processes</th>
<th>Maintenance variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological factors</td>
<td>Conduct disorder</td>
<td>School failure</td>
<td>Peers</td>
</tr>
<tr>
<td>(e.g. brain dysfunction)</td>
<td>Poor parenting</td>
<td>Cognitive style</td>
<td>Opportunities</td>
</tr>
<tr>
<td>Psychological factors</td>
<td>Early aggression</td>
<td>(e.g. hostile attributions)</td>
<td>Socioeconomic deprivation</td>
</tr>
<tr>
<td>(e.g. impulsiveness)</td>
<td></td>
<td>Substance abuse</td>
<td></td>
</tr>
<tr>
<td>Environmental factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(e.g. high crime neighbourhood)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Adapted from Nietzel, Hasemann and Lynam (1999).

A psychological profile of violence

Research has also begun to uncover some of the psychological processes characteristic of the violent person. For example, the influential work of Dodge and colleagues has drawn on social information processing (i.e. how we perceive and understand the words and actions of other people) to seek to understand the psychology of violence.

Crick and Dodge (1994; Dodge 1997) suggested that we follow a sequence of steps when we process social information (see chapter 17):

- encoding social cues
- making sense of these cues
- a cognitive search for the appropriate response
- deciding on the best option for making a response
- making a response

Dodge proposed that violent behaviour may result from deficits and biases at any of these stages.

Beginning with social perception, there is evidence that aggressive young people search for and encode fewer social cues than their non-aggressive peers (Dodge & Newman, 1981) and pay more attention to cues at the end of an interaction (Crick & Dodge, 1994). This misperception may in turn lead to misattribution of intent, so that the actions of other people are mistakenly seen as hostile or threatening (Akhtar & Bradley, 1991; Crick & Dodge, 1996).

Working out how best to respond to a situation is a cognitive ability often referred to as social problem solving. It involves generating feasible courses of action, considering potential alternatives and their likely consequences, and making plans for achieving the desired outcome (Spivack, Platt & Shure, 1976). Studies suggest that violent people show restricted problem-solving ability and consider fewer consequences than non-violent people (Slaby & Guerra, 1988). This sequence of cognitive events culminates in violent behaviour, which the violent person may view as an acceptable, legitimate form of conduct (Slaby & Guerra, 1988).

The role of anger

Cognitions interact with emotions (see chapter 6), and anger (particularly dysfunctional anger) is the emotional state most often associated with violent behaviour (Blackburn, 1993). Anger may be said to be dysfunctional when it has significantly negative consequences for the individual or for other people (Swaffer & Hollin, 2001). It would be wrong to say that anger is the principal cause of violence, or that all violent offenders are angry, but clearly it is a consideration in understanding violence.

Currently, the most influential theory of anger is Novaco’s (1975). According to Novaco, for someone to become angry, an environmental event must first trigger distinctive patterns of physiological and cognitive arousal. This trigger usually lies in the individual’s perception of the words and actions of another person.

When we become angry, physiological and cognitive processes are kicked into action. Increased autonomic nervous system activity includes a rise in body temperature, perspiration, muscular tension and increased cardiovascular activity. The relevant

Figure 21.5

Anger is the emotional state most often associated with violent behaviour.
cognitive processes (Novaco & Welsh, 1989) involve various types of information-processing biases concerned with the encoding of interpretation and triggering cues. For example, attentional cueing is the tendency to see hostility and provocation in the words and actions of other people, while an attribution error occurs when the individual believes that his or her own behaviour is determined by the situation, but that the behaviour of other people is explained by their personality (see chapter 17).

The progression from anger to violence is associated with the disinhibition of internal control, which can result from factors such as high levels of physiological arousal, the perception that there is little chance of being apprehended or punished, and the perpetrator’s use of drugs or alcohol.

Moral reasoning

There is a long history of research into the relationship between moral reasoning and offending (Palmer, 2003). Gibbs has examined the specific association between moral reasoning and violent behaviour, focusing on the bridge between theories of social information processing and moral development. Gibbs and colleagues suggest that this bridge takes the form of cognitive distortions (Gibbs, 1993; Goldstein, Glick & Gibbs, 1998) by which we rationalize or mislabel our own behaviour.

For example, if I perceive someone else’s actions as having hostile intent, leading me to assault them, my distorted rationalization might be that ‘he was asking for it’. Cognitive distortion
is also seen in my biased interpretation of the consequences of my behaviour. So I might say that my victim ‘could have had it worse’ or ‘wasn’t too badly hurt’ or that ‘no real damage was done’ (Gibbs, 1996). These powerful types of distorted thinking are often socially supported and reinforced by the offender’s peer group.

**WORKING WITH OFFENDERS**

Approaches to working with offenders have inevitably changed as our understanding of antisocial and criminal behaviour has developed, moving from psychodynamic psychotherapy, through group therapy, to behaviour modification. Yet there are those who see little merit in using treatment to reduce offending. (Hollin, 2001, has documented the struggle between proponents of treatment and advocates of punishment.)

But since the mid 1990s there has been a renewed interest in the treatment approach, stimulated by a clutch of studies using meta-analysis.

**Using meta-analysis to inform treatment programmes**

Meta-analysis allows inspection of the aggregated findings from a group of studies around a common theme. Its use in studies into the effects of offender treatment has had a profound effect on recent practice.

Offender treatment meta-analyses draw the critical distinction between clinical and criminogenic outcome variables. In this context, ‘clinical outcomes’ refers to changes in some dimension of personal functioning, such as psychological adjustment, attitudes or social competence. On the other hand, ‘criminogenic outcomes’ refers specifically to measures concerned with crime, such as self-reported delinquency, official reconvictions and type of offence.

As a broad generalization, treatment of offenders (as with other populations) tends to produce beneficial clinical outcomes (Lipsey & Wilson, 1993). But a significant contribution of the meta-analyses has been to highlight influences on criminogenic outcomes (in other words, those characteristics of treatment interventions that produce a reduction in offending).

Several meta-analytic studies have sought to identify the practical recommendations that can be taken from this empirical research (see McGuire, 2002, for an overview). The first major conclusion is that there is an overall reduction in reoffending after treatment – in the region of 10 per cent (Lipsey, 1992; Lösel, 1996). The second conclusion is that some interventions have a significantly greater effect than others – the most effective producing more than 20 per cent reduction in reoffending (Lipsey, 1992).

As the evidence accumulates, a broad consensus has been reached regarding the characteristics of treatments that impact on offending:

1. Indiscriminate targeting of treatment programmes is counter-productive in reducing recidivism. Medium- to high-risk offenders should be selected and programmes should focus on criminogenic targets: that is, treatments should be concerned with those aspects of the offender’s thinking and behaviour that can be shown to be directly related to their offending.

2. The type of treatment programme is important, with stronger evidence for structured behavioural and multimodal approaches than for less focused approaches. (The term ‘multimodal’ means using a variety of treatment techniques to address a range of targets for change, as discussed below with reference to Aggression Replacement Training.)

3. The most successful studies, while behavioural in nature, include a cognitive component, i.e. they encourage the offender to focus on their attitudes and beliefs.

4. Treatment programmes should be designed to engage high levels of offender responsivity: that is, the style of treatment should engage the offender to make him or her responsive to treatment and, at the same time, be responsive to the needs of different offenders such as juvenile or adult offenders or male and female offenders.

5. Treatment programmes conducted in the community have a stronger effect than residential programmes. While residential programmes can be effective, they should be linked structurally with community-based interventions.

6. The most effective programmes have high treatment integrity, in that they are carried out by trained staff, and treatment initiators are involved in all the operational phases of the treatment programmes.

The translation into practice of these principles derived from meta-analysis has become known as the What Works form of treatment programmes (McGuire, 1995).

The possibilities raised by the What Works principles have been recognized in the UK at a government policy level (Vennard, Sugg & Hedderman, 1997) and have significantly influenced work with offenders in prison and on probation. The development of national programmes for working with offenders has become a major initiative, seeking to capitalize on the possibilities raised by What Works (Lipton et al., 2000).

**Offending behaviour programmes – an example**

Aggression Replacement Training (ART) is an excellent example of a programme approach to working with offenders. ART was developed in the USA during the 1980s as a means of working with violent offenders. This training programme has proved to be an effective way...
ART has continued to be developed as the evidence base grows and practice techniques become more refined (Goldstein, Glick & Gibbs, 1998).

ART consists of three components, delivered sequentially, and so would qualify as a multimodal programme:

1. **Skillstreaming** involves the teaching of skills to replace out-of-control, destructive behaviours with constructive, prosocial behaviours. Social skills are taught in terms of step-by-step instructions for managing critical social situations. For example, offenders might be taught conflict negotiation skills for use in situations where previously they would have used aggression.

2. **Anger control training** first establishes the individual-specific triggers for anger, then uses the anger management techniques of (i) enhancing awareness of internal anger cues, (ii) teaching coping strategies, (iii) skills training, (iv) self-instruction and (v) social problem solving. Thus, offenders are taught to recognise their own feelings of anger and then helped to develop strategies, using new skills and enhanced self-control, to control anger and hence reduce aggression.

3. **Moral reasoning training** is concerned with enhancing moral reasoning skills and widening social perspective-taking. This is achieved through self-instruction training, social problem solving and skills training. The focus here is on increasing the offenders’ understanding of the effects of their actions on others, thereby enhancing the values that young people have for the rights and feelings of others.

**Figure 21.6**

Offender treatment programmes conducted in the community have a stronger effect than residential programmes.

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**Pioneer**

Don A. Andrews (1941–) is Professor of Psychology at Carleton University, Ottawa. He is arguably the most influential psychologist currently working in the field of offender rehabilitation. At a time when the practice of offender rehabilitation was vigorously challenged, Andrews was one of its staunchest defenders. He is a fierce critic of those criminologists who have questioned the place of psychology in understanding crime and criminal behaviour. A strong advocate of evidence-based practice and theoretical integrity, he developed a risk assessment instrument (the Level of Service Inventory) which is widely used by practitioners in the criminal justice systems of several different countries. His book, with James Bonta, *The Psychology of Criminal Conduct*, is a fine example of both his forthright style and the outstanding quality of his work.
The effectiveness of rehabilitation revisited

The research issue

Not surprisingly, there was significant opposition to the notion that ‘nothing works’ in offender rehabilitation. The literature included in the original review was re-examined by several researchers, who all reached different conclusions. Other researchers assembled different sets of relevant studies, which showed (they claimed) that treatment was effective. But still the broadly accepted position in government policy and community practice was that nothing works, and policies for managing offenders become increasingly punitive. (Even Martinson’s later article published in 1979, recanting much of his earlier views, failed to have any impact.)

The complex task of making sense of a large body of literature using a narrative review is always liable to lead to disagreement. The development and refinement in the mid 1980s of the technique of meta-analysis presented a more systematic and objective alternative to the narrative review as a means of making sense of the findings of a large body of literature.

The largest and most influential meta-analysis of the offender treatment literature to date was conducted by Lipsey (1992).

Design and procedure

The first step in Lipsey’s work was to establish the eligibility criteria for studies to be included in the meta-analysis. There were six criteria used in making decisions about inclusion, ranging from the nature of the outcome variables to the type of research design.

The next step was to gather the research studies together using searches of bibliographic databases. Lipsey noted that these searches produced ‘more than 8000 citations’ (p. 89) of potential relevance to the study. Once the individual studies had been collected and passed through the eligibility criteria, they were coded for analysis.

For the 443 studies included in the meta-analysis, Lipsey used a 154-item coding scheme, incorporating study characteristics such as type of treatment, research design, length of treatment, type of outcome measure, and so on. Once coded, the data represented the characteristics and findings of the 443 individual studies to be statistically analysed using meta-analytic procedures.

Results and implications

In meta-analysis a key outcome is effect size, which can be calculated in several ways but represents the outcome of the comparison between treatment and no treatment. It is also possible to calculate whether an effect size is statistically significant.

So with regard to recidivism, a positive effect size would indicate that treatment reduced offending, while a negative effect size would indicate that treatment increased offending. The magnitude of the effect size indicates the numerical difference in recidivism between treated and untreated offenders. A meta-analysis allows comparisons of the effect size of, say, different treatment types or treatment effects in different settings.

Lipsey reported an overall small positive effect size (a statistical measure of the impact of the treatment), so while it would not be true to say that ‘nothing works’, neither could an overwhelmingly strong case be made for treatment.

Importantly, meta-analysis also allows researchers to identify the characteristics of ‘high effect’ treatments (those treatments that produce a significantly high reduction in recidivism compared to no treatment). For example, Lipsey’s analysis strongly indicated that structured treatments, generally using cognitive–behavioural methods of treatment, gave greater positive effects in reducing recidivism than treatments based on non-directive counselling.

The impact of Lipsey’s work, taken in conjunction with other meta-analyses, can be seen in a large-scale resurgence in methods of offender treatment. This renewed interest has attracted significant government funding under the banner of ‘What Works’, with renewed endeavours in both research and practice.


Final Thoughts

It is appropriate to end with a cautionary note. The study of crime is not the province of any one discipline, and forensic psychology must guard against becoming isolated from a much wider multidisciplinary context. Of course, forensic psychologists must be aware of advances in their own discipline, but the real challenge is also to be aware of other highly related and mutually informative disciplines, such as criminology, law, psychiatry and sociology.

Having said this, it is an inescapable truism that crimes are committed by people, and if forensic psychologists cannot contribute meaningfully to understanding people's behaviour then something has gone seriously awry! Therefore, as much as psychologists should acknowledge the informative perspectives of researchers and practitioners from related disciplines, they and others should also acknowledge the unique perspective that psychologists themselves can offer in tackling illegal behaviour and dealing proactively with its perpetrators.

Summary

- Forensic psychology covers a great deal of ground, stretching into many areas including (but not limited to): cognitive psychology, as seen in the studies of eyewitness testimony, interview techniques, and social information processing accounts of violence; developmental psychology (which is critical for our understanding of delinquent development); and social psychology (which plays an important role in theories of criminal behaviour).
- There are a number of factors that can influence the accuracy of eyewitness memory, and research into the accuracy of eyewitness testimony focuses on three areas: acquisition, retention and retrieval. Research has also been put to good use in assisting police in structuring witness interviews appropriately.
- Sometimes people confess to crimes they did not commit, but there are important differences between voluntary and coerced confessions – in the case of coerced confessions, the suspect may even come to believe that their own memory for events is false.
- During crime investigations, interviewers use a variety of techniques to enhance memory retrieval in witnesses. Some of these enable the process of retrieval from memory to take place in a similar psychological context to that in which the information was first recorded, while others encourage the witness to try to use many different paths to retrieve the information.
- Even skilled questioners find it difficult to detect lies and deceit simply on the basis of a suspect’s verbal and non-verbal cues, so more advanced approaches are often needed.
- Thanks to studies such as *The Cambridge Study in Delinquent Development*, we now know that there are factors present during childhood that can predict adult offending, and important influences over the lifespan that help to explain and characterize violent conduct.
- Approaches to working with offenders have changed as our understanding of antisocial and criminal behaviour has developed, moving from psychodynamic psychotherapy, through group therapy, to behaviour modification, and a broad consensus has been reached regarding the characteristics of treatments that impact on offending.
- Like all good psychologists (and perhaps unlike their depiction in the popular media), forensic psychologists are concerned with evidence (in terms of methodologies for gathering robust data and appropriate methods of analysis) upon which to base appropriate theories and practice.
**REVISION QUESTIONS**

1. Are research findings from psychology sufficiently robust and reliable to be applied to real world problems such as crime?
2. ‘There is nothing so practical as a good theory.’ Is this true in forensic psychology?
3. A great deal of psychological research points to the shortcomings in the reliability of eyewitness and confessional evidence. How might psychologists tackle this problem?
4. Is it really possible to understand the psychological characteristics of a criminal from crime scene evidence?
5. With reference to the findings from longitudinal studies, is it true that the causes of delinquency are to be found at the level of the individual?
6. Discuss the view that spending money to treat criminals is ‘morally wrong and a waste of public money’; instead, it has been suggested that criminals should be punished for their crimes...

**FURTHER READING**

An assertive view of the role of psychology in explaining crime, particularly good on risk assessment and intervention.

A closely argued text that reaches a more advanced readership.

This book and its 1992 companion (see below) are broad-based texts primarily for undergraduate courses.

See above.

A comprehensive overview of legal psychology.

A detailed text with a clear focus on crime investigation and courtroom processes.

**Contributing author:**
Clive Hollin