



ANDREAS KAPARDIS

third edition

PSYCHOLOGY
AND LAW
A CRITICAL INTRODUCTION

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PSYCHOLOGY AND LAW

A CRITICAL INTRODUCTION

THIRD EDITION

Fully revised and expanded, the third edition of *Psychology and Law: A Critical Introduction* provides a comprehensive, up-to-date discussion of contemporary debates at the interface between psychology and criminal law.

Features new sections on:

- crime victims
- restorative justice
- police prejudice and discrimination
- International Criminal Court
- terrorism and profiling offenders.

Each chapter is supported by case studies and further reading. Other topics include: critiques of eyewitness testimony by adults and children, the role of the jury, sentencing as a human process, the psychologist as expert witness, detecting deception, and psychology and the police.

Andreas Kapardis draws on sources from Europe, North America and Australia to provide an expert investigation of the subjectivity and human fallibility inherent in our systems of justice. He also suggests ways for minimising undesirable influences on crucial judicial decision-making.

International in its scope and broad-ranging in its research, this book is the authoritative work on psycholegal enquiry for students and professionals in psychology, law, criminology, social work and law enforcement.

Andreas Kapardis is Professor of Legal Psychology, Law Department, University of Cyprus.

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AND LAW
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THIRD EDITION



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Encouraged both by the success of the second edition as well as by the knowledge that a great deal had meanwhile happened in legal psychology – and having been assured by my wife Maria and our children Elena and Konstantinos-Raphael that I would have their full support and understanding – I decided to accept CUP's suggestion for a third edition that would also include new sections on crime victims, restorative justice, the International Criminal Court, police prejudice and discrimination, profiling and terrorism. Inevitably, the book reflects my own background and interests in psychology, legal studies, criminology, penology and law enforcement. I hope it will be used as a textbook and will be of interest to undergraduate and graduate students as well as to professionals in psychology, criminal law, law enforcement, forensic psychology and social work.

As the manuscript goes to print, a sense of gratitude goes first of all to Maria, Elena and Konstantinos-Raphael for their patience and support all the months in 2008 and 2009 when I was working on the manuscript. A sense of gratitude also goes to three well-known British academics who inspired my interest in legal psychology when I was a student in their classes – David Farrington, Brian Clifford and Ray Bull. I consider myself fortunate to have enjoyed the excellent facilities and helpful assistance of the staff at the Radzinowicz Library, Institute of Criminology, Cambridge University, especially Mary and Stewart for tracking down at very short notice numerous invaluable references. I wrote parts of the manuscript in Nicosia, while attending a conference in Dubai and while staying at Clare Hall, my own Cambridge college. I could not have wished for more conducive environments. A special thanks goes to Ray Bull, Graham Davies and Willem Wagenaar for supplying me with material about their experience as expert witnesses. I am also especially grateful both to Susan Hanley for all her guidance, support and understanding while working on the manuscript as well as to Averil Lewis for editorial corrections of the manuscript. Of course, none of the individuals or institutions is responsible for any weaknesses, mistakes or opinions expressed in this work.

Soon after I started work on the third edition, early in 2008 I was appointed chair of a national committee on school violence in Cyprus and expected to table our report within two months. In addition, at about the same time I was appointed by the President of Cyprus chair of a technical committee on crime and criminal matters to hold talks with the Turkish-Cypriots in the buffer zone under the auspices of the UN in an effort to assist the two community leaders to find a solution to the political problem of the beautiful but still divided island of Aphrodite. As the

pressure on me mounted, when in May and June 2009 my brother Stelios and sister Maria respectively passed away, this book would not have been possible without the tremendous support and patience of my wife Maria. In appreciation, I dedicate this book to her and to our delightful children, Elena and Konstantinos-Raphael for helping out with karate training and, also, to my late parents Kosta and Sofia, my brother Stelios and, finally, my sisters Maria and Eleni, who all worked so hard so I could stay on at school.

FOREWORD

It is a great pleasure to welcome this third edition of Andreas Kapardis' textbook, *Psychology and Law*. The first and second editions rapidly became recognised as classic texts and have been widely used in undergraduate and postgraduate courses on legal and forensic psychology. My own students have found the previous editions incredibly useful and informative. They have also been of great interest to forensic psychologists and psychiatrists, academic and practising lawyers, law-enforcement personnel, and many practitioners and policy-makers.

This third edition is even better. Although it follows the successful organisation of the second edition, this edition has been completely revised and updated. Professor Kapardis has obviously put a huge amount of work into reading all the latest studies and clearly demonstrates his encyclopaedic knowledge of psychology and law. Useful features include margin notes, case studies and revision questions. Like the previous editions, this book is scholarly, detailed, wide-ranging and up-to-date, but nevertheless very readable. There is no comparable modern textbook with such an international coverage of research on psychology and law.

This international coverage, focusing on the UK, the USA, Canada, Australia and New Zealand, reflects the fact that Andreas Kapardis is a very international person. He completed Masters and PhD theses under my supervision at Cambridge University about 25 years ago and then taught and carried out research for a long time in Australia. Now he is pioneering research and teaching in legal and forensic psychology in Cyprus. Dr Kapardis is exceptionally knowledgeable about psychology and law throughout the world, as readers of this book will soon discover.

Compared with the previous editions, there are many new features in this book. In the chapter on the jury, the effects of characteristics of lawyers and judges on juries are reviewed. In the chapter on sentencing, there are detailed discussions of the important topics of victims and restorative justice. In the chapter on psychologists as expert witnesses, the legal status of the psychologist in court is specified. In the chapter on detecting deception, expert human lie-detectors and computerised lie-detection are discussed. Identification from CCTV images and facial composites are reviewed in the chapter on witness recognition procedures. Finally, there are many important new features in the chapter on psychology and the police, including prejudice and discrimination in relation to police work, offender profiling, the psychology of terrorism and characteristics of terrorists.

Forensic psychology is expanding very quickly in many different countries and there is an increasing need for trained scholars and practitioners. The value of applying the theories and methods of psychology to key issues arising in law and

legal processes is now widely accepted. One of the most important contributions of psychologists lies in their use of the scientific method, and especially the experimental method, to investigate legal questions. This book will be extremely valuable in training, as a source of the latest research information about such important topics as eyewitness testimony, children as witnesses, jury decision-making, sentencing, detecting deception, and psychology as applied to law enforcement (to mention only a few of the issues covered). I am delighted to welcome Andreas Kapardis' third edition as an outstanding contribution to knowledge about psychology and law. It should be essential reading for all legal and forensic psychologists, law-enforcement personnel and for all criminal lawyers and legal practitioners.

DAVID P. FARRINGTON

Professor of Psychological Criminology
University of Cambridge

1

PSYCHOLEGAL RESEARCH: AN INTRODUCTION

CHAPTER OUTLINE

- Introduction: development of the psycholegal field 2
- Bridging the gap between psychology and law 5
- Remaining difficulties 13
- Grounds for optimism 15
- Psychology and law in Australia 18
- Conclusions 20
- The book's structure, focus and aim 21

Psychology and law is still in a state of flux, but there have been considerable advancements in the field.

(Bartol and Bartol, 2004a:1)

In spite of the rhetoric about the interface between psychology and law, and the proliferation of scholarly writings about the two disciplines, in fact much of what forensic psychology purports to offer to the law is not taken up in the workday of the courts – sometimes for good reasons, sometimes not . . . The question that this generates is how welcome a guest really is at the legal table and how much the law is missing out on which could enhance its decision making processes?

(Freckelton, 2005)

The issues are not the relevance of psychology and law to each other but the extent to which the law and legal system should and are prepared, to embrace psychology and the extent to which psychologists should, and are prepared, to adapt their work to the needs and requirements of the legal system.

(Carson and Bull, 1995a:4)

INTRODUCTION: DEVELOPMENT OF THE PSYCHOLEGAL FIELD

The plethora of applications of psychology to law can be differentiated in terms of what has been defined¹ as: (a) *psychology in law*; (b) *psychology and law*; and (c) *psychology of law*. According to Blackburn (1996:6), *psychology in law* refers to specific applications of psychology within law: such as the reliability of eyewitness testimony, mental state of the defendant,² and a parent's suitability for child custody in a divorce case. Psychology in law has been the most common of the aforementioned three differentiations and the source of much of the uneasiness in legal psychology.³ *Psychology and law* is used by Blackburn (1996) to denote, for example, psycholegal research into offenders,⁴ lawyers, magistrates, judges and jurors. Finally, *psychology of law* is used to refer to psychological research into such issues as to why people obey/disobey certain laws,⁵ moral development, and public perceptions and attitudes towards various penal sanctions. As far as the term *forensic psychology* is concerned, Blackburn (1996:6) argues convincingly it should only be used to denote the 'direct provision of psychological information to the courts, that is, to psychology in the courts'.⁶ While there is no generally acceptable definition of *legal psychology*, the following one put forward by Ogloff (2000:467) is sufficiently broad and parsimonious, as he maintains, to reduce some of the confusion that surrounds this field: 'Legal psychology is the scientific study of the effects of law on people; and the effect people have on the law. Legal psychology also includes the application of the study and practice of psychology to legal institutions and people who come into contact with the law.'

Psycholegal research involves applying psychology's methodologies and knowledge to studying jurisprudence, substantive law, legal processes and law breaking (Farrington et al., 1979b:ix). Psychology and law became closer than they were to remain for the next two millennia in ancient Greece (Haward, 1981:16). Research into, and the practice of, legal psychology thus has a long tradition exemplified since the beginning of the twentieth century by the work of such pioneers⁷ as Binet (1905), Gross (1898), Jung (1905), Münsterberg (1908) and Wertheimer (1906). In fact, Münsterberg has been called 'the father of applied psychology'.⁸ The reader should note in this context that, as Ogloff (2000:461) and Bartol and Bartol (2004a:9) remind us, a number of well-known psychologists expressed an interest in applying psychology's findings to law as early as the 1890s. More specifically, we should note Cattell's (1895) article in *Science* which was concerned with how accurately one could recall information; Freud's (1906) lectures to judges in Vienna on the merits of psychology for law in establishing facts; Watson's (1913) view that judges could utilise psychological findings; the development in 1917 of the first modern polygraph by William Marston and, in the same year, the use by Louis Terman of psychological tests to screen law enforcement personnel;⁹ the employment in 1918 by the State of New Jersey of the first full-time correctional psychologist; and the first American psychologist to testify as an expert in a courtroom was in the case

of *State v. Driver*; 88 W.Va 479, 107 S.E 189 (1921). Paynter's (1920) and Burt's (1925) research into trademark and trade name infringements which was presented in court; Hutchins and Slesinger's (1928, 1929b) published work on psychology and evidence law; and, finally, the Russian psychologist Luria's (1932) work on the affect in newly arrested criminals, before being interrogated by police, in order to differentiate the guilty from the innocent (Ogloff, 2000:461).

Regarding publications in law and psychology, the following appeared in the early part of the twentieth century: the establishment in 1903 in Germany by Louis William Stern with the first journal concerned with the psychology of testimony (*Betrage zur Psychologie der Aussage*); Brown's (1926) *Legal Psychology: Psychology Applied to the Trial of Cases, to Crime and its Treatment, and to Mental States and Processes*; Hutchins and Slesinger's (1929a) article on 'legal psychology' in the *Psychological Review*; McCarty's (1929) *Psychology for the Lawyer and Cairns*' (1935) *Law and Social Sciences*.

Even though well-known psychologists expressed an interest in applying psychology's findings to law as early as the 1890s, the truth is that the psycholegal field really began to expand in the 1960s.

The psycholegal field has been expanding at an impressive rate since the mid-1960s, especially in North America, since the late 1970s in the UK, and in Australia since the early 1980s. In fact, on both sides of the Atlantic, research and teaching in legal psychology has grown enormously since the mid-1970s (Lloyd-Bostock, 1994). More recently, the field of psychology and law has also been expanding both in Europe, especially in the Netherlands,¹⁰ Sweden,¹¹ Germany,¹² Iceland¹³ and Spain,¹⁴ as well as in Japan.¹⁵ As the chapters in this volume show, since the 1960s psychology and law has evolved into a single applied discipline and an often-cited example of success in applied psychology. Ogloff (2001:4) argued that, 'Despite its long history, though, the legal psychology movement has had limited impact on the law, and until recently, it was focused primarily in North America'. However, the contents of this book attest to the fact that the legal psychology movement has had more than 'limited impact on law' on both sides of the Atlantic and, in contrast to Ogloff's assertion, it has not been mainly focused in North America. There appears to be an unfortunate, strong tendency among psycholegal researchers in the United States to be uninformed or, if informed, to avoid acknowledging relevant work in Britain and on continental Europe – an example of what Ogloff (2001:7–8) identifies as 'jingoism' and one of the 'evils' of the legal psychology movement in the twentieth century (see below). In this context, Haney (1993) pointed to psycholegal researchers having tackled some very crucial questions in society and, *inter alia*, been instrumental in improving the ways eyewitnesses are interviewed by law-enforcement personnel; the adoption of a more critical approach to the issue of forensic hypnosis evidence in the courts; psychologists contributing to improving the legal status and rights of children; and, finally, generally making jury selection fairer (pp. 372ff). Furthermore, the impact of legal psychology has not just been one way.¹⁶

Despite the early publications in legal psychology mentioned above, and while most lawyers would be familiar with forensic psychology, traditionally dominated

by psychiatrists, it was not until the 1960s and 1970s that lawyers in the United States came to acknowledge and appreciate psychology's contribution to their work.¹⁷ Since the 1970s a significant number of psycholegal textbooks have appeared in the United States,¹⁸ in England,¹⁹ and some have been written by legal psychologists on continental Europe.²⁰ In addition, following Tapp's (1976) first review of psychology and law in the *Annual Review of Psychology*, relevant journals have been published, such as *Law and Human Behavior* which was first published in 1977 as the official publication of the American Psychology-Law Society (APLS) (founded in 1968) and is nowadays the journal of the American Psychological Association's Division of Psychology and Law. Other journals are: *Behavioural Sciences and the Law*; *Expert Evidence*; *Law and Psychology Review*; *Criminal Behaviour and Mental Health*. New psycholegal journals have continued to be published. The first issue of *Psychology, Crime and Law* was published in 1994 and those of *Legal and Criminological Psychology*, and *Psychology, Public Policy, and Law* in 1996 in the UK and the United States respectively.

Despite the fact that in the UK lawyers and psychologists have been rather less ready than their American colleagues to 'jump into each other's arms', the push by prison psychologists and increasing interest in the field (for example, at the Social Science Research Centre for Socio-Legal Studies at Oxford, the Psychology Departments of the University of East London [previously North-East London Polytechnic], the London School of Economics and Political Science and Nottingham University, as well as at the Institute of Criminology at Cambridge) had gathered enough momentum by 1977 for the British Psychological Society to establish a Division of Criminological and Legal Psychology (see Farrington, 1999). By the early 1980s empirical contributions by legal psychologists at Aberdeen University added to the momentum. Annual conferences at the Oxford Centre formed the basis for Farrington et al.'s (1979a) *Psychology, Law and Legal Processes* and Lloyd-Bostock's (1981a) *Psychology In Legal Contexts: Applications and Limitations*, and these 'established a European focus for collaboration between the two disciplines, attracting scholars from many different countries'²¹ and paved the way for the more recent annual European Association of Psychology and Law (EAPL) Conferences. These two publications, together with Clifford and Bull's (1978) *The Psychology of Person Identification* and other British works published in the 1980s and early 1990s, helped to establish psychology and law as a field in its own right in Britain, despite the fact that in 1983 the Social Science Research Council, under a Conservative government, ceased funding conferences for lawyers and psychologists (King, 1986:1). Following a suggestion made at the EAPL conference in Siena, Italy, in 1996 by British academic David Carson, a very successful conference indeed was held at Trinity College, Dublin, jointly organised by APLS and EAPL. The conference was attended by over 600 delegates from 27 countries, and produced two excellent books, namely *Psychology in the Courts: International Advances in Knowledge* by Roesch et al. (2001) and *Violent Sexual Offenders* by Farrington et al. (2001). The second joint meeting of the American Psychology-Law

Society, the European Association of Psychology and Law and the Australian and New Zealand Association of Psychiatry, Psychology and Law was held in Scotland in 2003 and the third one in Adelaide, South Australia, in 2007.

Psychological associations outside the UK also set up relevant divisions, for example, in the United States in 1981 and in Germany in 1984.²² In 1981 the American Psychological Association founded Psychology and Law as its forty-first Division.²³ A significant development in the United States was the inclusion in 1994 of law and psychology in the *Annual Survey of American Law*. It was not until 2001, however, that the American Psychological Association recognised forensic psychology as a specialty, despite the fact that the *Specialty Guidelines for Forensic Psychologists* was published in 1991 by the American Academy of Forensic Psychology and the American Psychology-Law Society.²⁴ Besides a spate of international conferences on legal psychology that has been held in the UK and on continental Europe, there now exist both undergraduate and postgraduate programs in legal psychology.²⁵ Finally, a number of universities on both sides of the Atlantic have recognised the importance of legal psychology by dedicating chairs to the subject in psychology departments and law schools.²⁶ Interestingly enough, it was in 1922 that William Marson, known for his pioneering work on the polygraph and his empirical research into the jury system, was appointed professor of legal psychology.²⁷

With its emphasis on law in a social context, sociological jurisprudence has created a climate within law, which has been conducive for the development of legal psychology.

It must not be forgotten, however, that while, by the beginning of the 1980s, one-quarter of graduate programs in the United States offered at least one course and a number had begun to offer forensic minors and/or PhD/JD programs,²⁸ few psychology departments offered courses in psychology and law prior to 1973.²⁹ A search on the internet in November 2008 at the time of writing this book for forensic psychology graduate programs in English-speaking common law countries found 10 such programs in the UK, 33 in the United States, 10 in Australia and two in Canada.

1 BRIDGING THE GAP BETWEEN PSYCHOLOGY AND LAW: WHY IT HAS TAKEN SO LONG

The development of sociological jurisprudence,³⁰ with its emphasis on studying the social contexts that give rise to and are influenced by law, posed a challenge to the ‘black-letter’ approach to studying law which was based on the English common law and had been the linchpin of the legal system in North America. Sociological jurisprudence provided conditions within law that were favourable to the development of legal psychology, as did subsequent movements in law such as ‘legal realism’.³¹

In his book, *On the Witness Stand*, Münsterberg (1908:44–5) was critical of the legal profession in the United States for not appreciating the relevance of psychology

to its work. However, Münsterberg was overselling psychology and his claims were not taken seriously by the legal profession.³² In addition, according to Cairns (1935),³³ there was opposition from within the discipline of psychology by such scholars as Professor Edward Titchener of Cornell University, who maintained that psychologists should not seek to apply their findings but should confine themselves to conducting pure and scientific research. Not surprisingly, therefore, ‘the initial foray into law and psychology . . . did not generate enough momentum to sustain itself’.³⁴

The rather unfortunate legacy left by Ebbinghaus (1885) and his black-box approach to experimental memory research – best exemplified by his use of non-sense syllables – contributed to the state of knowledge in psychology at the time and was one significant factor that negated the success of Münsterberg’s attempt. Fortunately, the dominance of the black-box paradigm in experimental psychology came to an end with the publication in 1967 of Neisser’s futuristic *Cognitive Psychology* book. In the ensuing six decades, whilst behaviourism (on the one hand) and the experimental psychologists’ practice (on the other) of treating as ‘separate and separable’ perception, memory, thinking, problem solving and language³⁵ permeated and limited psychological research greatly, the early interest in psycholegal research fizzled out. As Ogloff (2000) points out, the continuing development of legal psychology after the 1930s was not only prevented by forces within psychology but, also, by a ‘conservative backlash in law which limited the progressive scholars in the field . . . The demise of legal realism had a chilling effect on legal psychology . . .’ (p. 463).

Ogloff lists the following possible lessons to be learned, and to avoid, from the demise of legal psychology after 1930: a small number of people working and publishing in law; lack of training programs for students; no identifiable outlet for psycholegal research; that those supporting the psychological status quo did not look favourably upon psycholegal research and, finally, the fact that legal psychologists were not formally organised (p. 462). By the late 1960s, as psychology matured as a discipline and, amongst other developments, social psychology blossomed in the United States, the experimental method came to be applied to problems not traditionally the concern of psychologists. Psychologists began turning their attention to understanding deception and its detection, jury decision-making, the accuracy of eyewitness testimony and sentencing decision-making as human processes. Most of the early psycholegal researchers with a strong interest in social psychology focused on juries in criminal cases, those with an affinity to clinical psychology concerned themselves with the insanity defence, while cognitive psychologists examined eyewitness testimony. These same areas continue to be of interest to psycholegal researchers today, but the questions being asked are more intricate and the methods used to answer them are more sophisticated.³⁶ Ogloff (2001:14), like Carson and Bull (1995a:9), urged legal psychologists to broaden their research interests to include more areas of law, including administrative law, antitrust, civil procedure, corporate law, environmental law, patent law, and family

law. The somewhat narrow focus of psycholegal research caused enough concern to Saks (1986) for him to remind such researchers that ‘the law does not live by eyewitness testimony alone’ and for Diamond to urge them ‘to explore under-represented areas of the legal landscape’ (p. vi). It is comforting for psychologists to know that, with the general growth and maturity of their discipline, major industrialised society has come to realise the wide-ranging benefits of psychology.³⁷ At the same time, legislators have increasingly been paying more attention to empirical findings by psychologists.³⁸

Why, then, has it taken so long for the field of psychology and law to develop when, as some authors would argue,³⁹ psychologists and lawyers do have a lot of common ground, when human behaviour is the very purpose of both psychology and law?⁴⁰ Both disciplines focus on the individual.⁴¹ Yarmey (1979:7) wrote that ‘both psychology and the courts are concerned with predicting, explaining and controlling behaviour’, while according to Saks and Hastie (1978:1): ‘Every law and every institution is based on assumptions about human nature and the manner in which human behaviour is determined’. Achieving ‘justice’ is the concern of law and lawyers, while the search for scientific truth is the concern of psychologists.⁴² The argument by Diamond (1992:vi–vii) ‘that law should be characterised as a component of psychology’ and, similarly, by Crombag (1994) that law may be considered a branch of applied psychology, are unlikely to endear psycholegal researchers to lawyers. A more realistic position to adopt than that of Crombag’s is that ‘to the extent that every law has as its purpose the control or regulation of human behavior, every law is ripe for psychological study’.⁴³

Haward (1981) pointed out that the law lags behind contemporary social thinking ‘while psychology tends to anticipate it’ (p. 16). Also, while the law relies on assumptions about human behaviour and psychologists concern themselves with understanding and predicting behaviour, both psychology and law accept that human behaviour is not random. More specifically, research in psychology relates to various aspects of law in practice.⁴⁴ As in other countries, the legal profession in Australia, justifiably perhaps, has been rather slow to recognise the relevance of psychology to its work. Compared to law, psychology is, chronologically speaking, entering its adulthood and, given a number of important differences between the two disciplines, it comes as no surprise that there is tension and conflict between the two disciplines⁴⁵ that persists.⁴⁶ Bridging the gap between the two disciplines on both sides of the Atlantic, in Australia, New Zealand and Canada, as well as, for example, in Germany, Spain, Italy and in the Netherlands and Sweden,⁴⁷ has not been easy. In fact, there is a long way to go before the remaining ambivalence about psychology’s contribution to academic and practising lawyers and ethical issues of such a function will be resolved.⁴⁸ Admittedly, ‘Different psychologists have different ideas about what psychology should be about’,⁴⁹ and ‘Law, like happiness, poverty and good music, is different things to different people’.⁵⁰ The simple fact is that there are

Psychology and law have a great deal in common but they also differ in a number of significant ways. Furthermore, conflict is endemic in the relationship between the two disciplines.

significant differences in approach between psychology and law. In fact, psychologists and lawyers are characterised by different objectives and the use of different reasonings.⁵¹ This point is well illustrated by eight issues which, according to Haney (1980)⁵² are a source of conflict between the two disciplines, namely:

- the law stresses conservatism; psychology stresses creativity
- the law is authoritative; psychology is empirical
- the law relies on adversarial process; psychology relies on experimentation
- the law is prescriptive; psychology is descriptive
- the law is idiographic; psychology is nomothetic
- the law emphasises certainty; psychology is probabilistic
- the law is reactive; psychology is proactive
- the law is operational; psychology is academic.

It can be seen that the two disciplines operate with different models of man. The law, whether civil or criminal, generally assumes free will and emphasises individual responsibility in contrast to the tendency by a number of psychological theories to highlight 'unconscious and uncontrollable forces operating to determine aspects of individuals' behaviour'.⁵³ In addition, 'The psychologists' information is inherently statistical, the legal system's task is clinical and diagnostic'.⁵⁴ As Clifford (1995) has put it: 'the two disciplines appear to diverge at the level of value, basic premises, their models, their approaches, their criteria of explanation and their methods' (p. 13).

In a submission to the Australian Science and Technology Council, in the context of its investigation into the role of the social sciences and the humanities in the contribution of science and technology to economic development,⁵⁵ it is stated that: 'Psychology discovers, describes and explains human experience and behaviour through the logic and method of science. Psychological research and application is based in a logical, empirical and analytical approach, and that approach is brought to bear on an exceptionally wide range of issues.'

On the other hand, 'Tradition is important to lawyers'⁵⁶ and, as Farrington et al.⁵⁷ put it, law 'is a practical art, a system of rules, a means of social control, concerned with the solving of practical problems'. Furthermore:

The law is based on common-sense psychology which has its own model of man, its own criteria . . . its own values. Common-sense explanation in the law is supported by the fact that workable legal processes have evolved under constant close scrutiny over many centuries. It is in this sense 'proven'. But this is quite different from explanation in terms of psychological theory backed by empirical evidence of statistically significant relationships (p. xiii).

Finally, whereas the image of human beings projected by American social psychologists is that of the 'nice person', the law, and especially the criminal law, is characterised by a more cynical view of human nature and this view tends to be adopted by those who work within and for the legal system.⁵⁸

Psycholegal researchers (for example, in eyewitness testimony and jury decision-making) have utilised a variety of research methods, including incident studies, field studies, archival studies and single case studies.⁵⁹ Many psychologists rely a great deal on the experimental method, including field experiments, to test predictions and formulate theories that predict behaviour and are sceptical of lawyers' reliance on commonsense generalisations about human behaviour based on armchair speculation, however ratified by conceptual analysis.⁶⁰ A feature that unifies a lot of psychological research is its preference for subjecting assertions to systematic empirical research and, where possible, testing them experimentally. This will often involve randomly allocating persons to different conditions who, at the time, are normally not told the aim of the experiment. Clifford (1995) provides an excellent account of psychology's premises and methods. The reader should note in this context that it is virtually impossible to duplicate exactly court proceedings in the laboratory (McEwan, 2003). One basic reason for this is that often, such is the complexity of the evidence in a trial that lawyers have to continuously scrutinise their materials, making trials long and boring (p. 4). Long duration and boredom, examination, cross-examination and re-examination of witnesses is not a feature of experimental simulations of eyewitness testimony, of course. Many psychologists who favour experimental simulation tend not to also consider the issue of values in psychological and psycholegal research in general, and in particular whether psychologists can indeed avoid value judgements by demonstrating the 'facts'.

Theoretical models of man espoused by experimental psychologists have involved man as a black box, a telephone switchboard and, more recently, man as a computer. These models, which are different from the lawyer's notion of 'free will', have been rejected by cognitive psychologists because they do not take into account man as a thinking, feeling, believing totality,⁶¹ as someone who interacts with the environment in a dynamic way.

For many a psychologist, a great deal of information processing is done without people being aware of it; the lawyer, on the other hand, operates a model of man as a free, conscious being who controls his/her actions and is responsible for them. What the law, based on a lot of judicial pronouncements, regards as 'beyond reasonable doubt' is rather different from the psychologist's conclusion that an outcome is significant at a 5 per cent level of statistical significance. One interesting aspect of this, for example, is the lawyer's reluctance to quantify how likely guilt must appear to be before one can say that such doubt as exists is not reasonable. The lawyer in court is often only interested in a 'yes' or 'no' answer to a question asked of a psychologist who is appearing as an expert witness, while, at best, the psychologist may only feel comfortable with a 'maybe' response. It should be noted, however, that the answers of interest to a practising lawyer might vary according to whether it is examination in chief or cross-examination. In the former, the lawyer is interested in a story, whereas in the latter, the lawyer is interested in

Lawyers focus on their individual client and emphasise how he/she differs from the stereotype and that one cannot generalise. On the other hand, psychologists talk about the probability of someone being different from the aggregate.

questions that require a 'yes' or 'no' answer. Also, lawyers look at the individual case they have to deal with and highlight how it differs from the stereotype; they try hard to show in court that one cannot generalise, whereas psychologists talk about the probability of someone being different from the aggregate.

In addition to significant differences between psychology and law (see Carson, 1995b), there is the fact that the approaches of various branches of psychology differ in the degree to which they are based on what might be called scientific experiments. Furthermore, both psychologists and lawyers have cast doubt on the practical utility of findings from controlled laboratory experiments that reduce jury decision-making, for example, to a few psychology undergraduates reading a paragraph-long, sketchy description of a criminal case and making individual decisions on a rating scale about the appropriate sanction to be imposed on the defendant.⁶² Rabbitt (1981) pointed out that 90 per cent of the studies quoted in standard textbooks on the psychology of memory then available only tested recognition or recall of nonsense three-letter syllables. Konečni and Ebbesen (1992: 415–16) argued that: 'It is dangerous and bordering on the irresponsible to draw conclusions and make recommendations to the legal system on the basis of simulations which examine effects independently of their real-world contexts' (that is, on the basis of invalidated simulations or those that are not designed to examine the higher-order interactions). Since the 1980s, jury research (see chapter 5) includes protocol analyses, in-depth interviews with jurors after they have rendered verdicts in real cases, elaborate simulations involving videotaped trials and juror respondents, and even randomised field experiments (see Heuer and Penrod, 1989). Similarly, eyewitness testimony researchers have been making increasingly greater use of staged events and non-psychology students as subjects, as well as utilising archival data (see chapters 2, 3 and 4).

More than two decades ago, King (1986) also criticised legal psychologists' strong reliance on the experimental method, arguing that there is a tendency to exaggerate its importance; that treating legal factors as 'things' and applying to them experimental techniques and statistical methods gives rise to at least four problems, namely, inaccessibility, external validity, generalisability and completeness (p. 31). King has also argued that exclusive reliance on experimental simulation also encourages legal psychologists to focus on inter-individual behaviours without taking into account the social context to which they belong (p. 7); that Karl Popper's (1939) refutability has been shown by philosophers of science to be a questionable criterion for defining whether a theory is scientific. Furthermore, King contends that the real reasons for legal psychologists' continued use of the experimental method as the prime or sole method for studying legal issues is: (a) a belief by psychologists that using the experimental method enables them to claim they are being 'scientific' in carrying out their research; (b) a need felt by psychologists for recognition and acceptability; and (c) a belief by psychologists that they are more likely to be accepted and recognised as 'experts' if they are seen to be 'scientific' (see chapter 7). King advocated a shift 'away from the restrictive and self-aggrandising

notions of what constitutes “scientific” research which have tended to serve as a starting point for much of what passes for legal psychology’ (p. 82). No doubt many psychologists would disagree with King’s (1986) push to get them to use the experimental method less in favour of ethnomethodology as their preferred method of enquiry. More psychologists, however, would agree with: (a) Proctor and Capaldi (2001) that in mainstream American psychology the scientific method is considered synonymous with hypothesis testing (p. 759); and (b) Kvale (1992) that such psychologists are unlikely to accept data and theory originating in literature, drama and non-scientific methods such as hypothetical data rotation, and, furthermore, that constructivists, contextualists and other post-modernists are not favourably disposed to hypothesis testing and experimental simulation (p. 760).

Highlighting the dangers inherent in studying eyewitness testimony under rather artificial conditions in the laboratory, Clifford and Bull (1978) reminded their readers that such research could lead psychologists to advance knowledge that is, in fact, the reverse of the truth, as in the case of the influence of physiological arousal on recall accuracy (see chapter 2). A theory of recall, or any other psychological theory for that matter, arrived at on the basis of grossly inadequate research could hardly be expected to be taken seriously by lawyers.⁶³

According to Hermann and Gruneberg (1993:55), in the 1990s memory researchers no longer presumed that a laboratory procedure would or would not extrapolate to the real world because the ecological validity issue in memory research had largely been solved. Hermann and Gruneberg proposed that: ‘It is time now to move beyond the ecological validity issue . . . to the next logically appropriate issue – applied research’. In so doing legal psychologists in the new millennium should heed Davies’ (1992) words that: ‘no one research method can of itself provide a reliable data base for legislation or advocacy. Rather, problems need to be addressed from a number of perspectives, each of which makes a different compromise between ecological validity and methodological rigour’ (p. 265).

In considering limitations of experimental simulations that do not endear it as a research method to lawyers, it should be emphasised that psychologists are not only interested in testing causal hypotheses primarily in the laboratory in order to be able to predict future events; but they are also interested in testing associative hypotheses by examining how often certain events happen together (Wright, 2006). Psycholegal researchers have been using both these methods.

Another reason why problems arise when psychology and law meet is that, as Lösel (1992:15) pointed out, for the psychologist the plethora of theories and perspectives in the discipline is a matter of course. In law, however, the main goal is uniformity and the avoidance of disparity. Consequently, lawyers regard the numerous viewpoints in psychology as contradictory. Taking the psychological literature on bystander intervention and using good samaritanism as an example (that is, intervening to assist or summon assistance for people in urgent need of such assistance – see Kidd, 1985), we find two conflicting decision-making models (see Kenrick et al., 2002, pp. 297–333, regarding prosocial behaviour). On the one hand,

experimental simulation studies of the phenomenon (see Latane and Darley, 1970) have given rise to a cognitive decision-making model. This model assumes that people are rational decision-makers who resolve to intervene directly or indirectly in an emergency after a series of decisions: whether an incident is an emergency, whether one has personal responsibility to get involved and, finally, whether the benefits outweigh the costs of intervention. On the other hand, there exists another model of bystander intervention, partly based on experimental studies (see Piliavin et al., 1981), partly on interviews with individuals who had heroically intervened in real-life crime situations and partly on comparisons with 'non-interveners' (see Houston, 1980), which depicts intervention as 'impulsive' and not as comprising a series of rational decisions. A basic assumption in law (see Luntz and Hambly, 1992) is that helping behaviour is the result of rational decision-making. The relevant psychological literature, however, provides conflicting views regarding the validity of this assumption for bystander intervention, a situation that does not help those who advocate introducing failure-to-assist provisions into the criminal law of jurisdictions like those of England and Australia which do not have such laws (see Geis, 1991).

Greer (1971) alerted his readers to the fact that many psychologists attempting to investigate questions of legal relevance on their own have had a rather limited view of legal objectives and, as a result, in the case of eyewitness testimony, for example, 'they failed to appreciate the intricacies and complexities of legal procedures for eliciting testimony... [and] tended to oversee the legal implications of their work and seemed to expect their findings to be regarded as virtual saviours of the integrity of the legal profession' (p. 142). Greer's comment applies more than three decades later to a significant amount of psycholegal research, as later chapters in this volume demonstrate. The need for legal psychologists to have an in-depth understanding of the relevant law has also been emphasised by Ogloff (2000:11) while McEwan (2005) has drawn attention to the fact that often psychologists involved in psycholegal research do not consider the legal implications of their work. Finally, for their part, Bartol and Bartol (2004a) go a step further and argue that psychologists should learn to do legal research (p. 13).

Lloyd-Bostock (1981b) drew attention to another problem besides that of extrapolating from the laboratory to real life, namely, in applying general psychological principles in the individual case. She has argued that: 'It is important to distinguish between application to particular cases on the one hand, and more general applications in policy formation on the other. Applications in individual cases (and hence expert evidence) are far more hazardous' (p. 17). Lloyd-Bostock has also maintained that while developments in the psycholegal field have paralleled more general developments within psychology, the relatively fast pace at which psychological knowledge changes and well-accepted theories are superseded detracts from the practical utility of psychological findings. As already mentioned, the prevailing legal model of man entails a conscious mind. As Lloyd-Bostock (1981b) rightly pointed out, this model is unlikely to be shifted in the face of psychological

knowledge. Furthermore, even some psychologists themselves (for example, King, 1981) have opposed such a shift because the very question of ‘whether the legal model should be shifted at all is a value judgement not a question of whether psychology or law is on an empirically sounder basis’ (Lloyd-Bostock, 1981b:19).

Another explanation as to why it has taken a long time for psycholegal research to be embraced by both psychologists and lawyers lies in the fact that, as psychologists present themselves as experts in the courtroom, they find they have to deal with ethical dilemmas regarding, for example, the confidentiality of their clients.⁶⁴ Toch,⁶⁵ in his book *Legal and Criminal Psychology*, warned of the danger of over-selling psychology, similar to that which has happened with psychiatry (see Szasz, 1957). Of course, there is the additional danger of psychologists peddling their expertise and producing a favourable opinion for a client in a legal case to whoever would pay their fee. The international experience has shown that the field of the expert psychologist in court (see chapter 7) can be a real money-spinner.

2 REMAINING DIFFICULTIES

Interestingly enough, however, as Lösel (1992:11–12) reminds us: ‘Despite the generally encouraging development of recent legal psychology, a number of problems still remain’. *Inter alia*, Lösel highlights the importance of the following factors.

- *The Internal Situation of Legal Psychology*: Lösel identified a great imbalance in the interest shown in various topics within legal psychology that still applies. For example, psycholegal researchers have focused on eyewitness testimony and ignored issues in civil law or custody law, taxation law, cross-cultural comparisons or more multinational research. Drawing on Carson (2005a), one could also add the neglect of interdisciplinary research into ‘reasonable behaviour’, contracting, managing dissatisfaction, complaints and fact-finding.
- *The Position of Legal Psychology within Psychology*: Worldwide, it would appear that there are only a small percentage of practising psychologists working in the field of legal psychology. This is, perhaps, not surprising in view of the fact that, as Lösel (1992:13–14) pointed out, legal psychology does not yet belong to the big areas of applied psychology and topics that concern legal psychologists are rather heterogeneous.
- *Legal Psychology’s Relation to Legal Science and Practice*: Lösel (1992:15) also rightly argued that how legal psychology would develop in the long run would depend on its relationship with the discipline of law and, above all, the legal profession. As this chapter makes clear, this relationship is inevitably not without conflict, as King (1986) and Melton et al. (1987) pointed out. Of course, the situation differs from country to country. To illustrate, the United States seems readier to include legal psychology in law faculties and established chairs in legal psychology earlier than has been the case in the UK or Australia. In the UK, for a number of years there has existed an independent Division of

Criminological and Legal Psychology within the British Psychological Society. In Australia, however, the College of Forensic Psychologists of the Australian Psychological Society, with its orthodox adherence to clinical psychology training as the prerequisite for anybody who might want to call themselves a forensic psychologist, has not, until relatively recently, provided strong encouragement for the development of criminological and legal psychology as a field in its own right. It could be argued that such a myopic attitude towards psychology and law excludes, for example, cognitive and social psychologists as well as lawyers who have a lot to contribute to legal psychology, that it discourages the teaching of legal psychology at both the undergraduate and postgraduate level and, finally, can be said to have almost stifled the development of the field in Australia. Fortunately, the pace of the discipline's development has accelerated in the last few years and looks likely to continue to do so.

- *New Psychological Findings vs Long-Term Establishments in Law*: As many psycholegal researchers know only too well, the wheels of law turn very slowly when it comes to change and, not surprisingly, it often takes a long time for new and established findings by psychologists to be enshrined in statute or to be taken account of by judges in their case law (Lösel, 1992:16).
- *Empirical Experimentation vs Principles of Equal Treatment and Fixed Jurisdiction*: Finally, Lösel drew attention to a major constraint imposed on psychologists by the law: because of the emphasis on equal treatment of like cases and fixed jurisdiction in the justice system, some field experiments that psychologists might wish to carry out are not possible (p. 16). Examples of such field experiments are in the sentencing of criminal defendants or in the reaction to child abuse (p. 16).

In order for legal psychology to continue to develop and mature as a discipline in its own right, certain 'evils' pointed out by Ogloff (2001) that have plagued its growth since the early part of the twentieth century need to be addressed.

Ogloff (2001) discusses a number of 'evils' that have plagued the development of legal psychology in the twentieth century and which need to be addressed in the light of the experience in order to ensure that legal psychology continues to develop and mature:

- 1 *Jingoism*, that is, focusing in a narrow way on one's own country. It would not be an exaggeration to say that psycholegal research in North America too often shows a great deal of ignorance about British and continental European legal systems and studies. As Ogloff points out, learning from the experience of other countries can only be for the benefit of the individual researcher as well as the discipline of legal psychology (pp. 7–8).
- 2 *Dogmatism*, even in the face of conflicting findings, stifles creativity and progress in the field (p. 9).
- 3 *Chauvinism*, especially in terms of sexism and ethnocentrism. The remedy here is to broaden the populations that are studied and to be sensitive to cultural differences and the needs of ethnic minorities and women (p. 10).
- 4 *Naïveté*, that is, undue ignorance of procedural and substantive law that pertains to one's area of work. Remedying this is essential in order to achieve high

external validity of one's findings and is conducive for identifying more and interesting legal questions to be investigated (p. 12).

- 5 *Myopia*, that is, being interested in a few, narrow areas of psychology such as jury decision-making or eyewitness testimony (pp. 13–14). As already mentioned above, legal psychologists need to broaden their areas of interest in law if they wish to have a significant impact on the law.

Ogloff's evils 4 and 5 are underpinned by many a psycholegal researcher's failure to 'look at the big picture' due to a tendency to focus on confessed, serious crimes and a failure to think in terms of systems and processes in order to sell some interventions (Carson, 2005b).

According to Carson (2005a), other problems that still remain are the fact that very rarely do psychologists and lawyers have an opportunity to socialise 'after hours' and so increase their understanding of each other's issues and concerns, and limited ambition and openness to interdisciplinary perspective. Another problem that could be mentioned is the strong tendency by legal psychologists to be method- rather than phenomenon-orientated and to lack first-hand knowledge of the legal issue they investigate. Such first-hand knowledge could be obtained by means of (a) participant observation, fieldwork, and/or interviews with the main protagonists over a sufficiently long period of time, and (b) by being knowledgeable about the broader socio-legal context in which is located the narrow topic one is interested in. Instead, most legal psychologists rely on experimental simulation as a short-cut to knowledge (King, 1986:91). Finally, the results of psycholegal research would be more likely to be accepted by members of the legal profession, academic lawyers and policy-makers alike if psychologists showed greater familiarity with both common law and statutory provisions relevant to their research, as well as with different theoretical stances in contemporary legal theory (see Davies, 1994) instead of a myopic perception of a legal issue. As shown in chapter 5, there is more to the jury debate for academic and practising lawyers than simply the nature of the decision-making processes that underpin jury verdicts. Furthermore, utilising their research findings, psychologists should encourage 'constructive debate of basic jurisprudential issues of lively interest in the community' and not, rather conveniently, leave it to politicians to judge the significance of psycholegal research (Stephenson, 1995:136).

3 GROUNDS FOR OPTIMISM

The differences mentioned above have been exacerbated by the lack of communication between the two professions and the concomitant absence of collaborative research.⁶⁶ Despite differences between psychology and law, the two disciplines are inextricably bound together by virtue of their common role as far as regulation of human behaviour and their responsibility for maintaining the social fabric in a civilised society as well as their use of common psycholegal concepts are

concerned.⁶⁷ It is comforting, perhaps, to know that, as evidenced in the chapters that follow, the scope of psycholegal research has widened significantly beyond its early concern primarily with eyewitness testimony and juridic decision-making. In fact, by the 1980s, there was an important increase in psycholegal research into, for example, the honesty of tax-payers⁶⁸ and social cognition of tort law⁶⁹ and wider acceptance of the view that the value of psycholegal research can be both theoretical and practical,⁷⁰ of interest to both the practitioner and the academic psychologist and lawyer. Diamond (1992) argued, in fact, that the truly challenging, intellectual questions psychologists should be asking about law require them not to yield to the temptation to equate success with recognition by lawyers, a temptation that is the more understandable given the power of law and lawyers in society.

Raising questions about what psychology can contribute to law and the difficulties and ethical questions that occur does not mean that difficulties should be exaggerated.⁷¹ Similarly, while 'identifying and dwelling on difficulties may seem unduly pessimistic, exposing problems in a joint enterprise is not incompatible with a belief in its value'.⁷² Writing in 1981 Lloyd-Bostock pointed out that: 'Current topics of research in psychology and law are so diverse and sprawling that it is not possible even to offer an exhaustive list, let alone any idea of the type of work being done on each' (1981b:2). As evidenced by presentations at international psychology and law conferences since the early 1990s, psycholegal research has continued to expand in both quantity and range, and to a significant degree, in quality, too.

The interested reader could be forgiven for coming to the view that the available textbooks on psychology and law contain material on such a range of topics as to render psycholegal research an applied field and to depict psychologists as only interested in questions of direct practical interest to the legal fraternity. However, a number of textbooks,⁷³ including this volume, contain chapters addressing questions of interest to practising and academic lawyers, as well as law-enforcement personnel, that do have immediate policy implications. As Diamond (1992) put it, the psycholegal field 'encompasses questions about how people exercise social control and how responsibility, resources, and risk are allocated. The capacity for basic research in psychology and law has not been fully explored.' The reader should note in this context that, as positivism recedes as the dominant paradigm that organises the discipline of psychology and psychologists utilise, for example, interpretive and participatory methods,⁷⁴ the capacity for psycholegal research is greatly enhanced.

As we advance into the twenty-first century, some feel that the full potential of the psycholegal field will be realised only with the development of a distinctly psycholegal jurisprudence (see Small, 1993). To some extent a feeling of frustration still characterises both legal psychologists and lawyers (Pennington and Hastie, 1990:103). Psychologists are appalled when lawyers continue to ignore what the psychologists consider good empirical research results and, consequently, fail to resolve issues in law. For their part, the lawyers wish the psychologists would try

harder to make their work more useful by ensuring that it is more relevant to actual legal contexts and 'less convoluted' (p. 104). Legal psychologists can, nevertheless, look back on a century of existence and take pride in their achievements. The research that is considered in the following chapters provides enough evidence for the belief that, by going a considerable way in bridging the gap between psychology and law, psycholegal researchers have provided us with knowledge the total of which is more than the sum of its parts. This realisation provides, perhaps, the best basis for optimism about legal psychology's future.

The wide range of topics dealt with in this and other textbooks does not mean that psychology and law is a field comprising a loose collection of topics – psychology and law is a recognisable field. Psychology has a unique perspective – its concern with the individual in a social context – and a unique contribution to make to law. In this regard, psycholegal research differs from such related fields as sociology of law in the way it addresses issues as well as in the methodology it uses. As the contents of this volume and others like it attest, psychology has been and is making a significant contribution to law in a number of ways. While not forgetting the narrower focus of a lot of psycholegal research alluded to above, the evidence is overwhelming that psychologists offer a unique perspective on law and have shown themselves capable of transcending the narrow boundaries of early psycholegal research to also address issues of the macro-sociological level, since the vast majority of psychologists today consider behaviour to be a function of both the individual and the environment. 'Boundaries [in psychology and law] are thus seen as providing contours and emphases rather than erecting walls' (Diamond, 1992:viii). In hindsight, Lösel (1992:16–17) was justified in concluding his overview of legal psychology that there is justification for optimism as far as the future of legal psychology is concerned: 'In both law and psychology . . . there is a growing understanding for the possibilities, peculiarities and idiosyncrasies of the other side . . . recent legal psychology seems to be one of those fields in which psychology's relationships to neighbouring disciplines has developed relatively successfully'.

In pondering the future of psychology and law and deciding how best to move forward in the twenty-first century, psycholegal researchers should consider their position on the range of problems of the legal psychology movement in the twentieth century raised by Ogloff (2001; see above), as well as an additional number of concerns raised by Haney (1993:376ff). They include: that, generally speaking, psycholegal research has not been well received by appellate courts; the discipline of psychology and law appears to have abandoned its sense of shared purpose – its mission of legal change; psycholegal researchers have a strong tendency to accept the legal status quo, thus precluding attempts to change it; researchers continue to give the impression that psycholegal research is value free and, consequently, are in no position to debate values and

Psycholegal researchers have provided us with knowledge the total of which is more than the sum of its parts. This realisation provides, perhaps, the best basis for optimism about legal psychology's future.

lack a ‘coherent framework’ around which to organise their research; and, finally, that the focus is on fine-tuning procedures in the legal system to make them fairer and not on the outcomes of the procedures, and thus psychologists contribute to perpetuating social inequalities and injustices.

There can be no doubt that the experimental method has a number of merits. It must not be forgotten, however, that it also has its limitations and often, in order to understand, explain adequately and predict a particular psycholegal phenomenon, the experimental method needs to be supplemented by other methods. As the chapters that follow show, there has been a general tendency for researchers in the psycholegal field to be reluctant to combine different research methods, instead relying excessively on experiments of often questionable external validity and, furthermore, failing to locate their work in a contemporary critical socio-legal context. Without ignoring the constraints under which university-based psycholegal research often has to be conducted, a first step in making good these deficits and advancing psychology and law further as a discipline in its own right internationally would be a conscious effort by psychologists to increasingly use representative samples of the wider community or of particular groups in the justice system such as police officers, judges or ex-jurors as subjects where this is appropriate and under forensically relevant conditions, to invest more time in the field relevant to their specific research interest, familiarising themselves with actual situations, as observers, utilising archival material and talking with practitioners. Finally, legal psychologists have also neglected public education, thus rendering themselves almost impotent in the political arena when it comes to translating their knowledge into social and legal change. As Haney (1993) argued, psycholegal researchers should adopt a more critical perspective on the legal issues they study (p. 386) in order to ‘confront several conceptual stress points that remain in our discipline’ and to resolve the conflict and confusion that still exists about professional values (p. 392).

Carson (1995b) suggested that the way forward for psychology and law is primarily through ‘collaboration focused upon change’ (p. 38). Carson and Bull (1995b) were more specific about what the way forward for psychology and law should be when they advocate ‘finding ways in which psychology’s product can – appropriately and always questioningly and critically – aid, and question, legal processes and goals’ (p. 645).

4 PSYCHOLOGY AND LAW IN AUSTRALIA

Psycholegal research in Australia has not flourished to the extent it has done so on both sides of the Atlantic; it still involves a limited number of psychologists who tend to be relatively isolated from each other. Not surprisingly, in addition to Australian psycholegal research published internationally, there has been a small number of publications in Australian psychology journals or Australian books on such topics as: psychology and law;⁷⁵ eyewitness testimony;⁷⁶ forensic

hypnosis,⁷⁷ the psychologist as expert witness,⁷⁸ confidentiality in the psychologist-client relationship,⁷⁹ recovered memories,⁸⁰ psychology and policing⁸¹ and the lie-detector.⁸²

Since 1980 the main focus for Australian and New Zealand psycholegal researchers has been the annual congress of the Australian and New Zealand Association of Psychiatry, Psychology and Law.⁸³ In addressing the second such congress in 1981 Justice Michael Kirby stated that: ‘one of the constant themes of the Law Reform Commission has been the need to bring together various specialised disciplines, particularly in the design of new laws’, and, ‘in an age of science and technology, this interdisciplinary communication useful at any time, becomes imperative’. The publication in 1994 of the *Psychiatry, Psychology and Law* journal in Australia and the March 1996 special issue on forensic psychology of *Australian Psychologist*, (31:1), have been significant steps in formally establishing psycholegal research in Australia as a field in its own right. The fact remains, however, that, in addition to the vastness of the Australian continent, the relatively small number of prison psychologists and small number of practising and academic forensic psychologists, the situation in Australia has really been no different from that in the UK where there is ‘a deep-rooted suspicion and scepticism among both lawyers and psychologists about the value of such interdisciplinary work’ (King, 1986:1). This is not surprising, perhaps, in view of the very little contact and exchange of ideas between the thousands of psychologists and lawyers in Australia.

Australia has a population of approximately 21 million and 39 universities, two of them private. According to the Australian Psychological Society (APS) Accreditation Council, in March 2008 there were 25 universities offering four-year degree courses accredited for the purpose of associate membership of the Society, 43 university campuses offering psychology courses consisting of an approved sequence of three years, almost all the universities were offering approved fourth-year courses and, finally, masters and doctoral courses accredited for membership were being offered by 35 universities. At the same time, 28 university campuses were offering accredited LLB degree courses. Postgraduate degrees in forensic psychology (masters and/or doctorates) were offered at 10 universities (twice as many than in 2002), namely, Edith Cowan, Charles Sturt, New South Wales, Western Sydney, Monash, Deakin, South Australia, Bond, Griffith and James Cook. The large number of psychology and law courses, as well as the development of the discipline of Legal Studies with its focus on law in context and an increasing number of publications by Australian law reform bodies,⁸⁴ have no doubt helped to increase awareness of the relevance of social sciences in general and legal psychology in particular to law scholars and practitioners. Tremper’s (1987a) assessment that on both sides of the Atlantic and on continental Europe that: ‘The current state of legally oriented social science research is a mixture of success and unfulfilled promise’ (p. 267) still applies, albeit to a lesser degree. It is hoped that, as psycholegal research in Australia expands, interested psychologists and lawyers will become better organised and will be able to contribute more to Royal Commissions

and Law Reform bodies and to the work of the courts, as their counterparts have done in the United States⁸⁵ and Britain.⁸⁶

5 CONCLUSIONS

Indicative of the efforts being made to bridge the remaining gap between psychology and law is the fact that the first session of a colloquium on law and psychology at University College London in July 2005 focused on ‘finding a relationship’ and included presentations on topics such as ‘Breaking down the barriers’, ‘Legal decision-making: psychological reality meets legal realism’ and ‘Psychology and law: whose fault?’. At the same time, others (see Fishman, 2004) feel enough confidence in the psycholegal field to call for the establishment of a ‘Psycholegal Nexis, a forensic psychology computerised database that would parallel Lexis–Nexis or Westlaw.’

In the words of Ogloff and Finkelman (1999:1), ‘although progress has been made during this the field’s “developmental phase”, there is still much room for the field to grow and develop’. As legal psychology’s maturity as a discipline continues, the arguments presented lead to the cautious conclusion that the first decade of the new millennium marks the onset of a new era in legal psychology, characterised by a certain amount of healthy tension within psychology itself as well as between psychology and law. This multifaceted tension can be said to provide both the impetus and the focus necessary for the further maturity of this rather interesting field. Ogloff and Finkelman (1999:18) predicted that: ‘As the law becomes more open to the empirical realities introduced by the social sciences, it is probable that psychology will become even more welcome in the legal system’. At the same time, however, they urge that care be taken to educate courts and legislatures to prevent them from distorting or otherwise misrepresenting social science findings (p. 18). It would appear their advice has gone largely unheeded by legal psychologists. As far as bridging the remaining gap between psychology and law is concerned, eradicating Ogloff’s (2000) ‘five evils’ that have plagued the development of legal psychology as a discipline would go a long way, especially at a time when on both sides of the Atlantic and in the Antipodes the courts have taken a less restrictive approach to admitting expert testimony by psychologists (see chapter 7).

Those working in psychology and law can look back with a sense of pride to their discipline’s development, albeit occasionally a chequered one, and its various achievements, especially regarding police and court procedures. They can also look forward to the discipline’s promising future. At the same time, it is nice to know that the impact of psychology and law has been a two-way process (Davies, 1995). Recognising psychology’s limitations regarding, for example, the external validity of a lot of experimental psycholegal research, and utilising more than one research method to study a particular phenomenon, as well as mistakes made in the effort to bridge the gap between the two disciplines (for example, overselling psychological research findings to the legal profession), and learning from them would seem to

be imperative if, in Carson and Bull's (1995b) words, psycholegal researchers are to increase the legitimacy of the infant offspring of the relationship between the two disciplines. Psychology and law is by now an established discipline in North America, the UK, on continental Europe, in Japan and in Australia. One of its main pillars has been eyewitness testimony, the subject of the next chapter.

6 THE BOOK'S STRUCTURE, FOCUS AND AIM

This book is intended to provide students at undergraduate and postgraduate level with a general overview of a number of important specific topics from the perspectives of different English-speaking common law countries (United States, UK, Australia, New Zealand and Canada). The topics surveyed are inevitably only part of the interface between psychology and law. The author's intention is not to provide a complete overview of psychology and law. Consequently, other areas, such as psychological research into people's perceptions of decisions about justice,⁸⁷ confidentiality in psychological practice,⁸⁸ clinical approaches to working with offenders,⁸⁹ psychological evaluations for the courts,⁹⁰ including competency, criminal responsibility and violence prediction, and 'psychology of the law' literature, all of which deserve and have received book-length treatment of their own, are not included, and the book is not concerned with civil law.

In the remainder of the book chapters 1–7, which some authors might classify under 'psychology and courts', fall within Haney's (1980) 'psychology in law' category: eyewitnesses – key issues and event characteristics; eyewitnesses – the perpetrator and interviewing; children as witnesses; the jury; sentencing as a human process; and the psychologist as an expert witness. The remaining three chapters (detecting deception, witness recognition procedures, and psychology and the police) are examples of Haney's 'psychology and law' category, also known in the literature as 'psycholegal studies', where the concern is with 'behaviour within the legal system as an arena of legal interaction' (Blackburn, 1996:6).

In each specific area the book aims to provide a comprehensive up-to-date survey of the published literature, drawing upon European and Australian work as well as more traditional North American sources, also giving sufficient of the legal background to provide a proper context for the psychological research. Appropriately, for a textbook, the present author is content to let the major protagonists in the literature speak for themselves. For a number of years now, there has been no comprehensive treatment of such a broad range of areas at the interface between psychology and criminal law and criminal procedure. The present book is intended to remedy this.

REVISION QUESTIONS

- 1 Into which different areas can we classify legal psychology?
- 2 What do psychology and law have in common?

- 3 What are some of the major differences between psychology and law?
- 4 How do you believe the remaining gap between psychology and law could be bridged?
- 5 Are you optimistic about the future of legal psychology? Why?

ADDITIONAL READING

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2 EYEWITNESSES: KEY ISSUES AND EVENT CHARACTERISTICS

CHAPTER OUTLINE

- Legal aspects of eyewitness testimony 25
- Characteristics of human attention, perception and memory 29
- Eyewitness testimony research: methodological considerations 32
- Variables in the study of eyewitness memory 39
- Variables that impact on eyewitnesses' testimony accuracy 41

Testimony to personal identity is proverbially fallacious.

(William James, 1890:97)

The status of the eyewitness as the best and most reliable source of evidence has been severely undermined . . . Identification parades provide only limited safeguards against wrongful identifications . . . The fact that a witness has confidence in the identification is no indication that it is right . . . Legal systems are still struggling to accommodate scientists' doubts about reliability.

(McEwan, 2003:203)

Memories, unlike videotapes or photocopies, are personally constructed. And that is why two people can experience the same event and recall it differently.

(Myers, 2001:317)

It is important not to exaggerate the fallibility of human memory. Memory is often wonderfully detailed and accurate.

(Lindsay and Read, 1994:293)

INTRODUCTION

The above quotes reflect the concern over the years with the limitations of eyewitness testimony, the more recent acceptance of the fact that the whole process of observing and recalling faces and events is a complex, interactive and dynamic one and, finally, that we should not overlook the fact that such testimony can be accurate. To illustrate, a Dutch study by Van Koppen and Lochun (1997) analysed data on individual characteristics of suspects pertaining to 1650 real-life robbery eyewitness descriptions and found that the degree of agreement between the witness description and the police description was, for gender and eyeshape (100 per cent), hair colour (73 per cent), face shape (69 per cent), race (60 per cent), height (52 per cent) and ears protruding (50 per cent). Interestingly, in contrast to the findings of laboratory studies (see below), the longer the delay between the crime and the statement of the witness, the more accurate was the description of the witness. When Benton et al. (2005) surveyed jurors, judges, law enforcement officers and eyewitness experts they found that eyewitness memory is not commonsense; more specifically, jurors disagreed with the experts on 87 per cent of the issues while judges and law enforcement did so on 60 per cent of the issues. Benton et al. concluded that those surveyed had a significant deficiency in knowledge of eyewitness memory, an indication that the courts would benefit from expert testimony (see chapter 7). In another interesting study, Granhag et al. (2005) surveyed police officers, prosecutors and judges in Sweden about eyewitness testimony and found that, even though some important research findings have reached those working in the field, they hold many wrongful beliefs about eyewitness testimony, beliefs that might impact adversely on the accuracy of legal decisions.

Eyewitness testimony is of crucial importance for both crime investigators and lawyers. Kebbel et al. (2006) had participants commit a mock crime, namely, stealing a mobile phone. As experienced police investigators would have predicted, when later questioned about the theft, those subjects who were presented with evidence from a witness who was said to have seen the offence were more likely to confess than subjects who were not confronted with such evidence (see also chapters 8–9). Not surprisingly, therefore, within the psycholegal field, testimony, especially eyewitness testimony, has attracted a lot of attention over the years. Since the 1980s the treatment of court witnesses by the criminal justice system began to improve. Memory issues permeate the law and psycholegal studies of eyewitness testimony constitute one of the pillars of legal psychology. As the content of this and the next two chapters indicate, more empirical studies have been reported in this area of legal psychology than in any other area. Furthermore, assumptions about human memory are inherent in both substantial and procedural rules without which the legal system could not function.

1 LEGAL ASPECTS OF EYEWITNESS TESTIMONY

The great importance of eyewitness testimony in criminal law can be seen in a number of different ways):¹ the various safeguards in law to protect defendants from wrongful conviction on the basis of mistaken identification; in the evidence that eyewitness testimony influences the outcome of trials;² as with all evidence, the prevailing practice by courtroom lawyers to discredit the other side's witnesses in order to win;³ and, finally, the very strong interest shown in testimony by psycholegal researchers and law reform bodies alike (see Cooney, 1994, for a sociologist's analysis of the social origins of evidence).

Despite the safeguards in the legal system to protect defendants against wrongful conviction on the basis of mistaken identification, unfortunately there is no shortage of such cases. In a criminal trial the prosecution must prove its case beyond reasonable doubt and the jury has to be certain of the defendant's guilt. However, both police and prosecution incompetence as well as pressure on investigators to bring offenders in high-profile murder cases to justice go some way towards accounting for travesties of justice. In such cases, frequently doubtful witness identification of a suspect combined with questionable circumstantial and forensic evidence is presented in such a way as to mislead the jury, resulting in a conviction. The case of *R. v. George* ([2002] EWCA Crim. 1923, [2007] EWCA Crim. 2722) illustrates the said phenomenon.⁴

CASE STUDY

A miscarriage of justice in England

On 26 April 1999, Miss Jill Dando, a well-known TV presenter, was shot once to the head at point-blank range and killed as she was about to enter her home in Fulham, London. Forensic scientists recovered a single particle of firearm discharge residue (FDR) from the cartridge case in the vicinity of the victim's hair, because the killer had pressed the gun to the victim's head when he discharged it. A year later, on 17 April 2000, Barry George's flat was searched and police found a single FDR inside a pocket of a coat that was his. He was arrested for Miss Dando's murder on 17 May, a year after witnesses had named him, and was charged on 29 May. The police held five live identification parades after his arrest but none of the five witnesses picked George. Later on, four other witnesses were asked to pick George from a video identity parade and one of them did so. Three witnesses who had said to the police they had seen George briefly in the area failed to pick him in the video identity parade. When testifying at the trial, the one witness who identified the accused said it was



raining at the time and he had caught a glimpse of the accused under an umbrella. At the trial, the prosecution evidence consisted of a claim by the one witness who had identified George in the video identity parade that the accused was at the scene of the murder about four hours before the shooting. Three other witnesses alleged the same but had failed to positively identify George. Distorting the results of the identification parades conducted, the prosecution made it appear to the jury that they were all consistent in locating the suspect at the scene of the crime. The prosecution also presented evidence of George having lied reputedly when questioned by the police that he had a strong interest in Miss Dando, that he had tried to create a false alibi for the time of the shooting and, finally, that the FDR found at the scene of the crime within the victim's hair was similar to, but did not match completely, the single FDR particle found in the pocket of Barry George's pocket. On 2 July 2001, after deliberating for 32 hours, the jury convicted George by a majority of 11–1 of the murder and he was sentenced to life imprisonment.

On 5 November 2002 the Criminal Cases Review Commission received submissions made on George's behalf. The first appeal against the conviction was rejected by Justice Cage in the Court of Appeal. On 19 May 2007 the Commission decided to refer the case to the England and Wales Supreme Court of Appeal (Criminal Division) on the grounds that new evidence called into question the firearms discharge evidence presented at the trial and the significance which the court seems to have attached to that evidence.

The appeal was heard by the Lord Chief Justice the Right Honourable Lord Justice Leveson and the Honourable Justice Simon. Their Justices found that the FDR evidence was inconclusive, the jury's verdict was unsafe and on 15 November 2007 quashed the conviction. What is noteworthy for the purposes of the present chapter, is that only witnesses linked George Barry to the murder and the fact that a comparison of George's photograph with the e-fit (see chapter 9) produced after the murder showed significant similarities. It is also difficult to believe that the trial judge allowed identification evidence against the accused, even when the witnesses had initially failed to indicate him. Finally, it is reasonable to ask how did a jury decide to convict on the basis of such doubtful witness identification and forensic evidence?

The courtroom procedure followed in British, American, Australian, Canadian and New Zealand courts and in other countries with a common law system (for example, Malta, Cyprus) is known as the 'adversary system'.⁵ This basically means that different sides to a dispute fight it out in court in order to obtain a favourable judgement.⁶ This is based on the belief that the 'truth' is most likely to be discovered when the disputing parties each present their version of the facts in question to a magistrate (lay or stipendiary) or to a judge or to a judge and jury. So strong is this belief that until the US Supreme Court ruled in the case of *Maryland v. Craig*

(1990) 497 US 836, a defendant's absolute right to confront his/her accuser/s face to face was, in fact, guaranteed by the Sixth Amendment of the Constitution. Generally speaking, unlike Royal Commissions in the UK, Canada, New Zealand and Australia, or Senate Committees, House of Representatives Committees, Presidential Commissions or Grand Juries in the United States, for example, which follow an 'inquisitorial' procedure, a court of law in common law jurisdictions may not call its own witnesses or carry out its own investigation into the case before it; it simply arrives at a decision on the basis of the evidence and arguments put before it by the two parties according to the rules of evidence and procedure, which are intended to ensure a fair trial (see Jackson, 1995; McGinley and Waye, 1994; Murphy, 2007; Smith, 1995; Waight and Williams, 1995).⁷

A widely known rule, the *hearsay rule*, enables a court in common law countries to exclude statements by persons who are not witnesses and who, therefore, cannot be cross-examined (Gillies, 1987). In common law jurisdictions, a criminal or civil case often involves, then, a contest between two parties in which the party initiating the proceedings wants to convince the court that the defendant incurred criminal or civil liability. Typically, in non-guilty plea cases the different parties will disagree about material facts of the case, and the prosecutor in a criminal case or the plaintiff in a civil case will lead evidence to convince the court as to the existence and nature of those facts. The defendant has the choice of also 'adducing' evidence. Parties to a dispute can attempt to prove material facts by direct or circumstantial evidence. 'Direct evidence is that which goes directly to prove a material fact. Circumstantial evidence requires the fact finder to draw inferences other than that the witness is correctly reporting what their senses registered' (McGinley and Waye, 1994:9). There is a presumption that evidence should be given to a common law court in oral form (Magner, 1995:25). Therefore, oral evidence is an important feature of most trials and legal disputes in general. As Leippe (1994) rightly pointed out, the existence of an eyewitness is of importance in the investigation of a crime, in making the decision to prosecute a suspect and at trial where a confident witness could sway the jury (p. 385).

According to Doyle (1989:128–9), lawyers believe that cross-examination represents 'The greatest legal engine ever invented for the discovery of the truth' (Wigmore, 1974, s.1367). Each party has a right to cross-examine the other side's witnesses, to question them in order to discover other facts or in order to cast doubt on the importance the court should place on the evidence already provided by the other side's witnesses. If the cross-examination discovers some new fact, then the first party may re-examine. It is up to the magistrate or the judge, as the case may be, to decide whether the evidence being led by a particular party is admissible on the basis of existing law of evidence. Given the tremendous importance of cross-examination for trial outcomes, it should be noted that, as McEwan (2003) points out: 'Cross examination plays upon the suggestibility of witnesses... A primary aim of cross-examination is to lure witnesses into inconsistency, thus undermining their credibility' (p. 96). Of course, cross-examination

of witnesses does not guarantee that there will be no wrongful convictions due to false identification. As the extensive literature cited in this chapter shows, there is indeed an 'eyewitness identification' problem. Unfortunately, some authors take a rather narrow view and write about this problem as if it were synonymous with witness error in identifying a suspect in an identification parade/line-up, a task that does not confront the great majority of witnesses in criminal investigations and prosecutions.

Psycholegal researchers run the risk of exaggerating the practical importance of their studies if they are unaware, for example, that the great majority of criminal defendants plead guilty (Willis, 1995) and, consequently, all material facts are not in dispute. Also, most criminal cases in western common law English-speaking countries are not decided by a jury and, finally, eyewitness testimony plays but a minor role in crime detection. The last point is brought home by a study of burglary and violence offenders in Nottingham, England, by Farrington and Lambert (1993). They found that: (a) victim descriptions of suspects accounted for 2 per cent of burglary and 14.7 per cent of violence offenders arrested; and (b) witnesses' descriptions contributed 6.7 per cent and 13.3 per cent to burglary and violence arrests respectively. Also, many experimental psychologists seem to have overlooked the fact that a trial under the adversary system is not a search for ultimate truth but a means of settling disputes. Lawyers are, first and foremost, interested in winning their case in court, not in being impartial – as psychologists researching witness testimony might wish them to be. Furthermore, experimental psychologists reporting studies of the reliability of eyewitness testimony have generally failed to locate their work in a truly psycholegal context by relating their findings to the relevant law of evidence and procedure in the jurisdiction where the research has been conducted (see Konečni and Ebbesen, 1992).

Research into the reliability of witness testimony has the longest history in psychological research, its formal beginnings stretching back to the beginning of the twentieth century.⁸ Interestingly enough, however, when McConkey and Roche (1989) administered a questionnaire to introductory psychology, advanced psychology and advanced law students in Sydney, Australia, to assess their knowledge of eyewitness memory, it was found that they all had a relatively limited knowledge of the topic in question. Similar findings have been reported by American,⁹ Canadian¹⁰ and UK researchers.¹¹ Bennett and Gibling reported that police officers and members of the general public alike had rather poor knowledge of many important factors in eyewitness testimony (for example, the impact of violence, post-event contamination, witness confidence), indicating the need for improvement in police training. Eyewitness testimony has been the most popular topic in psycholegal research. By 1995 alone there were over 2000 publications in psychology concerned with eyewitness reliability (Memon, Vrij and Bull, 2003:109). The voluminous growth of witness identification research is not surprising in view of the vast literature on human attention, perception, memory and narration processes involved in all testimony.

The *Police and Criminal Evidence Act* (PACE) of 1984, which introduced the tape-recording of police interviews of suspects and provided law-enforcement officers in England and Wales with guidance on the collection and preservation of eyewitness evidence, preceded similar developments in the United States by 15 years,¹² replacing the *Judges' Rules* which had been adopted in 1964. On both sides of the Atlantic and in the Antipodes experimental psychologists have been appearing in court more and more frequently as expert witnesses to tell the court and juries about the psychology of testimony in general and eyewitness testimony in particular (see chapter 7). This is an interesting development in view of the myriad cases, both criminal and civil, in which witness testimony plays an important part. While not suggesting that witness testimony is never reliable, the fact is that such testimony is often challenged in court and, as the empirical evidence in this and the next two chapters shows rather convincingly, it is subject to error. Many lawyers, police personnel and the public at large, however, assume that witness testimony is more reliable than other kinds of evidence. The available psycholegal research has not as yet eradicated the belief that human perception and memory operate like a tape-recorder or a video camera, that witnesses see and hear correctly and so testify.

Of course, a witness may testify dishonestly or honestly but incorrectly, or may disappear, recant or die before the case comes on for trial (Greer, 1971). It is the honest, cooperative witness who is the concern of this chapter. As Lord Devlin (1976) put it: 'the highly respectable, absolutely sincere, perfectly coherent and apparently convincing witness may, as experience has quite often shown, be mistaken'. In most jurisdictions there is no shortage of cases of mistaken identity, including some unfortunate ones where the defendant was executed. More common are cases where people (see Hain, 1976) are arrested and prosecuted by the state on the basis of identification evidence that is subsequently discredited (Buckhout, 1974:23). According to Connors et al. (1996), DNA testing on people in the United States who had been convicted of rape and other crimes that leave biological evidence has revealed a number of cases in which innocent defendants were convicted on the basis of inaccurate eyewitness testimony, often by the victim (see Wells et al., 1998).

2 CHARACTERISTICS OF HUMAN ATTENTION, PERCEPTION AND MEMORY

Everyday witnesses in criminal and civil cases all over the world are asked by police, lawyers and others in and out of court to recall details of events, to describe a face and so forth on the assumption that the human memory operates like a video-recorder, a neutral and accurate recording device. Apparently, the same model permeates the literature on accident investigation (Kelloway et al., 2004). This misleading passive model of human attention, perception and memory has, since the late 1970s, given way to the view that these are active processes, that perception and memory are also constructive processes, that a person's knowledge of the world

around them is of paramount importance in understanding what and how he/she perceives events or other stimuli and what they remember about them (Clifford and Bull, 1978).

Human attention, perception and memory are dynamic processes.

The available experimental evidence in cognitive psychology is evidence that goes back to Bartlett (1932) and his finding that perceptions are assimilated into organisations or schemata: that when we remember a story, for example, we try to ‘make sense’ of what we remember. Such evidence leaves no doubt that perception and memory are ‘social systems’ (Buckhout, 1974) with structural and functional limitations. Many aspects of eyewitness behaviour cannot be explained unless we consider what someone is, what they are trying to do and the ways their values, attitudes, expectations and motivations act not only at the time of attention and perception but also during the period of storage, and especially when they are being asked to remember. In other words, perception involves a contribution from the perceiver; human memory is both selective and constructive and ‘we make sense of things and come to perceive them in terms of the sense we have made of them’ (Lloyd-Bostock, 1988:5).

The mental processes by which we come to understand things is known as ‘cognition’ and is made possible by the combined work of attention, perception and memory. According to Davenport (1992), human attention can be thought of as a ‘low capacity, single channel’ operation that enables us to selectively attend to stimuli in our environment and within us (pp. 127–33). ‘Perception’ refers to those processes that take in, and make some sense of, all our sensations, that is, the input from our senses. Perception is an active process whereby we interpret what information we receive so that it is meaningful to us. How we interpret sensations is influenced by our age, cultural background, expectations, emotions, particular specialist knowledge and so forth (p. 135).

There are different kinds of memory and researchers have identified different processes that comprise a ‘central executive’.

In a matter of a few years memory researchers have shifted from proposing a somewhat monolithic view of long-term memory to a view that differentiates different kinds of memory. The three-stage processing model of memory (Atkinson and Shiffrin, 1968) has proved a useful framework for thinking and talking about the mind. This model posits: (a) that the mind combines three memory stores, namely, a sensory memory, a working or short-term memory and a long-term memory; and (b) that the processing of information within stores and the movement of information between stores is governed by the following three central processes that comprise the *central executive* by controlling the flow of information:

- *attention* – from the sensory store into the working memory
- *encoding* – from the short-term memory into the long-term memory
- *retrieval* – from the long-term memory into the working memory (Gray, 1999:322).

The available research evidence points to an impressive degree of specialisation in how information is stored (Gray, 1999:484). Finally, when psychologists distinguish between different kinds of memory, this is best understood ‘as reflecting the different processes that can be used to access a common memory trace’ (p. 482). More recently, experimental psychologists Pansky et al. (2005) have proposed a theoretical framework that specifies the critical role of metacognitive monitoring and control processes in strategically regulating memory performance. While memory appears to be organised into separate stages or processes, the fact remains that its short-term storage lasts for less than 20 seconds, by which time new input will displace existing information. The memory can hold no more than seven items at one time unless information is passed into the long-term store for permanent storage, from where it can be retrieved (Davenport, 1992:153–4). Failure to retrieve information from our memory may reflect: failure to encode information correctly; that information may have been displaced; the memory trace has simply faded away or decayed with the passage of time; or there may have been interference from later input which sounded similar and impacted negatively on the short-term memory or is semantically similar and interfered with information in the long-term memory (Davenport, 1992; Gray, 1999). In addition, forgetting can be due to retrieval failure because stored information cannot be accessed. Many clinicians would argue that forgetting can be due to repression, that is, a process by which, according to Freud, the mind pushes into the unconscious a memory of a traumatic experience. This is also known as ‘motivated forgetting’. However, despite attempts to integrate the cognitive and the psychodynamic unconscious,¹³ as the discussion of the whole issue surrounding the subject of recovered memories of childhood sexual abuse shows (see below), the concept of repression (see chapter 3) is a rather controversial one.¹⁴ Despite such controversies, there is general agreement that the human memory does not operate like a video-recorder and, therefore, there is an undisputed need that interviews of crime victims/witnesses by police and other investigators are informed by in-depth knowledge about the human memory and how it normally operates.

According to Davies (1993a:368), three representative theories of remembering that have impacted on the controversy surrounding the processes involved when eyewitnesses recall are: (a) *schema theory*;¹⁵ (b) *multiple-entry modular memory model, or memory monitoring*;¹⁶ and (c) the *headed records* theory.¹⁷ While schema-based (constructionist) theories hold that memory is subject to post-event contamination through assimilation and distortion over time and one cannot, therefore, access the original memory because it no longer exists, monitoring memory and headed records posit that memory events leave records that cannot be altered and are accessible under the appropriate circumstances (see Davies, 1993a for a critical evaluation of these three theories).

In considering the structure and functioning of human memory we must not forget such memory disorders as *amnesia*, *hypermnnesia*, and *paramnesia* (see Kopelman, 1987; Yanagihara and Petersen, 1991). Amnesia (that is, some defect/s

of the mental process/es responsible for registration, retention and retrieval of information) may be total or partial, temporary or permanent, and may be attributable to cerebral causes (for example, senile dementia, brain injury) or to inattention which, in turn, may be voluntary or involuntary. Someone charged with a crime such as murder may claim amnesia, but whether the amnesia is genuine or not would be a fact to be contested in court (see Gudjonsson, 1992a:96–9; Taylor and Kopelman, 1984, and the English case *R v. Podola*, Court of Criminal Appeal, October 1959).¹⁸ *Hypermnnesia* refers to being able to retain and retrieve an incredible amount of detail (see Ham, 1996; Hunter, 1957, for descriptions of two such prodigies). Ham describes the case of Briton, Dominic O'Brien, who has won the World Memory Championships for three consecutive years and who in 1995 won by memorising 2080 playing cards – a total of 40 packs – in the exact sequence in which they were dealt (pp. 27–8). Another individual famous for his incredible feats of memory is the well-known conductor Arturo Toscanini who is reported to have known every note of every instrument of 250 symphonic scores, 100 operas and numerous other musical works (Gray, 1999: 330). *Paramnesia* means false recollection, a clinical condition that can be attributed to 'a disorder of the mental processes responsible for the appreciation of feelings of familiarity' (Power, 1977:137). An everyday example of paramnesia is the occasional déjà vu experience familiar to most people. With increasing incidence, this experience becomes responsible for fabrications or 'illusions of memory'. The term 'confabulation' is used by clinicians to describe cases where people 'fill in' memory gaps with imagined experiences as when they suffer from Korsakoff's psychosis (Carson et al., 2000:382). Before turning our attention to methodological aspects of eyewitness research and the numerous factors that have been studied, one question that should perhaps be answered is: How good is witness memory?

Early experimental psychological studies examining recognition rates for photographs (see Chance et al., 1975) reported accuracy of over 90 per cent even after a delay of up to 35 days. Such studies, however, lack ecological validity and their findings would not be of great interest to lawyers. In studies that have used a paradigm high on both experimental and mundane realism as well as ecological validity by staging an event rather than using a face photograph, accuracy turns out to be 12 to 13 per cent for identification¹⁹ and between 25 per cent for recall details in civilians²⁰ and about 47.5 per cent for policemen in very simple, static but live, situations (Clifford and Richards, 1977).²¹ Accuracy levels, however, need to be evaluated against the level of 'accuracy' one would expect on the basis of chance alone.

3 EYEWITNESS TESTIMONY RESEARCH: METHODOLOGICAL CONSIDERATIONS

In their well-known textbook *Psychology and Law*, Bartol and Bartol (2004a:10–17) outline four methods of obtaining knowledge, namely, tenacity, authority, a

priori and science. Psychological research into witness testimony that has utilised the scientific method enables psychologists to appear as expert witnesses in trials in the United States²² where eyewitness testimony plays a crucial role more frequently²³ and has impacted on the rules governing the admissibility of children's evidence in England and Wales,²⁴ where experimental cognitive psychologists²⁵ have had an input into the specialist training given to police officers who produce composite pictures of suspects, and legal psychologists²⁶ have only relatively recently been allowed to testify as experts in court. At the same time, however, 'Nowhere are the problems of the generalizability and reliability of research findings more acute than in the study of witnessing' (Davies, 1992), and, 'Not surprisingly, the methodology and status of eyewitness research has been the subject of [considerable] debate and controversy' (p. 265).

The controversy has centred almost exclusively around the generalisability (external validity) of traditional, experimental laboratory research to forensic contexts. The crucial question in this context is whether psycholegal researchers are measuring what they claim to be measuring, such as real-life eyewitness accuracy. For some, such laboratory research is indispensable,²⁷ for others, it is anathema to the generalisability of such research findings to real life (Yuille, 1986) and should be abandoned in favour of realistic field situations while, finally, for others, both research methods are so limited as to yield almost useless findings.²⁸ In considering laboratory studies of eyewitness testimony accuracy it should be remembered that the bystander, the unaffected eyewitness to a crime, is a rather rare occurrence in forensic contexts when considering the number and type of witnesses interviewed by police as part of their criminal investigations.²⁹ Furthermore, there is evidence from ecologically valid research that people who participate in an event recall more details than do observers.³⁰ It is imperative that experimental psychologists validate their simulation studies by also carrying out real-world studies in the sociolegal context to which they wish to generalise their results.³¹ Bruck and Ceci (1995) discuss the issue of the external validity of laboratory studies in their *amicus brief* in the *Michaels* case regarding children's suggestibility (see chapter 4). They conclude that, 'while we may never possess perfect knowledge about a phenomenon, we must base our inferences on the most scientifically rigorous evidence we have available' (pp. 308–9).

It would appear that the most defensible position for psycholegal researchers to adopt is that 'caution should be used in generalising from controlled research to real world contexts (Yuille and Wells, 1991:127); legislation or advocacy cannot be based on one research method; issues need to be addressed from different perspectives; and, finally, only by pooling the results of these different varieties of study is a reliable psychology of the eyewitness likely to emerge'.³² The discussion of different research methods that follows draws heavily from Davies (1992, 1995).

Experimental psychologists should validate their simulation studies by also carrying out real-world studies in the sociolegal context to which they wish to generalise their results.

Types of Research Methods Used

Slide presentation

More than 85 years ago, Stern (1910), believing one method to be better *a priori*, strongly advocated the use of staged events as a more fruitful method of studying witness accounts than simply presenting them with static photographs. Showing slides depicting an event has been useful in researching subjects' face recognition (Young and Ellis, 1989). However, as Clifford (1978) pointed out, a series of slides shown to subjects ignores not only the dynamic nature of a criminal offence but also the richness of detail in an event, as well as the fact that in most cases witnesses are not given notice that a crime is about to take place and to focus their attention accordingly. In addition, in real life, faces of suspects come with the rest of their bodies and, unlike in the psychological laboratory, it may be a considerable time before a witness is asked to describe a crime suspect (Davies, 1992; MacLeod et al., 1994). Researchers have found a lower rate of misidentifications with slide presentations than with staged events (see Lindsay and Harvie, 1988) as well as lower recognition rates (Clifford and Bull, 1978). Due to advances in technology and a significant shift from studying faces to studying events, the use of slides in eyewitness testimony research is very rarely used nowadays.

Staging an event

In a staged event that must have left an indelible memory on the minds of those present (jurists, psychologists and physicians attending a scholarly meeting), Münsterberg (1908) quite suddenly introduced a clown in colourful clothes followed by an African-American with a revolver. To the surprise of those present, there took place shouts and other wild scenes. The whole episode was over in 20 seconds. Like a normal experimenter, Münsterberg asked his scholarly subjects to write down what they had witnessed. Only one of 40 reports handed in contained less than 20 per cent of serious omissions while 34 of the witnesses made positively wrong statements. Finally, more than 10 per cent of the statements made were simply false in a quarter of the written testimonies. What made this early experiment the more noteworthy is that the witnesses were a scholarly bunch, supposedly astute observers and honest and decent citizens.

Research utilising staged events involving, for example, mock shootings (see Trankell, 1972)³³ found that unsuspecting witnesses, unlike psychology student subjects in laboratory experiments who generally expect to be asked questions about what they have seen, are shocked and panic, experience shaking, dryness of the mouth, cold sweat and difficulty with breathing. Not surprisingly, perhaps, under such conditions their performance as witnesses would be expected to be adversely affected. Such 'event tests' vary in complexity and the degree of violence involved. As this chapter shows, eyewitness testimony researchers prefer the experimental simulation method. Davies (1992:226–7) points out a number of limitations

of this particular method: for example, subjects watching a violent event may well dissociate themselves from it;³⁴ ethical considerations dictate that subjects consent to taking part in such a study – a factor that limits the data they will subsequently provide; and, finally, subjects used as offenders are almost always college students³⁵ and, one should add, who are not representative of the general public, are well accustomed to participating in experiments and are rewarded academically for doing so. This context is a far cry from a bank-teller or service-station attendant whose life is being seriously threatened by a hardened, career offender committing an armed hold-up wearing a balaclava and brandishing a hand gun or sawn-off shotgun, for example (see Kapardis, 1989), or a teenage girl who, in tears, arrives at a police station to report that someone tried to abduct her on the way home from school or, finally, a pensioner who wakes up in the middle of the night and disturbs a burglar who proceeds to assault him/her. The shortcomings mentioned by Davies (1992) limit significantly the extent to which one can justifiably generalise findings about witness testimony from studies using such methodology. To illustrate, in real-life criminal cases witnesses are interviewed and make statements to the police well ahead of attending trial to testify; at the trial, they are examined, cross-examined and even re-examined. Not surprisingly, therefore, it is almost impossible to simulate court proceedings in an experimental context (McEwan, 2003:4). In addition, the reader should note that laboratory studies of witness identification accuracy run the risk of under-estimating the extent, for example, of witness suggestibility. Lane (2006) reported that dividing attention during encoding increases an eyewitness' suggestibility. The implication of Lane's finding is that in the typical laboratory conditions under which a subject pays full attention to visual stimuli during encoding may well underestimate the suggestibility of subjects in eyewitness research. The desirability of research that allows a lot of control of the laboratory, while at the same time being forensically relevant, cannot be overemphasised (see Yuille et al., 1994, for an example of such research).

Field studies

There are, of course, limits on the types of factors that can be examined by innocuously deceiving subjects involved in field studies and as they go about their daily routines. Of course, a finding obtained by using both experimental simulation and field research is undoubtedly more convincing evidence (Konečni and Ebbesen, 1992:421). Admittedly, it is not possible to research the impact on witness accuracy of all variables that might be of interest to a researcher in a field because of both logistical and ethical constraints on such research. As Davies (1992:268) reminds us, in order to examine enough variables, field studies need to be supplemented by archival research and case studies which paint a better picture of the reality of witnessing. Finally, another limitation of field studies is that, unlike simulated crime experiments, the innocence or guilt of the suspects is not easily known independently of how the eyewitnesses behave (Wells, 2007).

Archival studies

Here the researcher examines, for example, police files to identify crucial variables. Illustrating with an example, MacLeod (1987) examined 379 witness statements associated with 135 cases of assault. In support of earlier experimental findings,³⁶ it was found that, where injury occurred, women gave fewer details of their assailant than did men. In addition, MacLeod (1987) also found that bystanders gave less information about both events and appearance than did victims – findings of some interest as laboratory studies have tended not to address the victim vs bystander accuracy comparison. Davies (1992:269) also cites archival research that has confirmed the overwhelming saliency of a suspect's hair and upper facial features relative to lower ones, for example. A good example of an archival study is one in Britain by Halford et al. (2005), which examined the identification performance of forensic eyewitnesses exposed to weapons and violence. They conducted an archival search of 24 000 police case files and analysed eyewitness identification parade data from 345 such cases involving 851 witnesses, giving a total of 1001 eyewitness exposures to identification parades. The researchers examined, for example, differences in identification accuracy as a function of weapon presence and, in contrast to the findings reported by laboratory studies of the weapon focus effect, they found that victims exposed to weapons identified the suspect significantly more frequently. Closed-circuit television (CCTV) is a feature of most large cities and CCTV footage sometimes provides a means by which to enhance the methodological validity of real-life studies of eyewitness accuracy, as was the case in the Fahsing et al. (2004) study of armed robbery eyewitnesses in Oslo, Norway. The major limitations of archival studies of witness accuracy are the absence of information on the accuracy of the descriptions provided by witnesses to the police in cases where the perpetrator has not been apprehended or has been acquitted, and lack of control of potentially key variables which lead to confounding of data (Van Koppen and Lochun, 1997). For example, with the exception of child abuse cases where there is in many countries a recording or video-recording of the interview, a researcher analysing data from official police records will not find details of the style used to interview the witness, a factor that, as shown in the next chapter, has been shown to impact on eyewitness testimony accuracy.

Single case studies

In view of the limitation of archival studies mentioned, Yuille and Cutshall (1986) and Yuille and Kim (1987) in Canada and Davies (1992) in England have examined the statements of a number of witnesses in a serious crime for which someone has been convicted. Yuille and Kim (1987) found that, contrary to what laboratory testimony researchers would have us believe, the testimony of witnesses to serious crime is reliable. Yuille and Kim, however, were only able to interview a self-selected minority of the witnesses to a gun-shop shooting in Burnaby, Vancouver, four to five months later, a limitation that casts doubt on the veracity of

their findings. Davies' case study of an armed robbery in Birmingham in which shots were fired and that involved 14 witnesses being summoned to the identification parades, concluded that his findings 'accord much more closely with the view of witnessing which emerges from laboratory research than that arising from [Yuille and Cutshall's, 1986] the Burnaby study' (p. 271). Davies (1992) concluded that 'Case studies, however crucial and illuminating, do not open the doors to some alternative reality which will overturn the findings of more traditional research' (p. 272).

Survey studies

Surveys of the general public or different legal professionals, for example, are not without their limitations, namely, low response rates resulting in self-selected samples and difficulties in ensuring the reliability of the data collected. Utilising both quantitative and qualitative data (see Bryman, 1988; Robson, 1993) can yield interesting findings about people's experiences, perceptions, and attitudes towards a broad range of issues of interest to psycholegal researchers, including the law, victims, offenders, witnesses, lawyers, police, policing, the courts, sentencing, civil suits and various tribunals.

Meta-analysis

As the reader will note throughout this book, one of the problems that plagues psycholegal research is conflicting research findings, often due to differences in how independent variables are measured. In addition, many studies use small-size samples. Meta-analysis is a statistical technique that combines all the published studies on a given topic into one large study by amalgamating, summarising and reviewing the results of the studies included.³⁷ Meta-analysis reports findings in terms of effect sizes. The usual indicators of effect sizes are the standardised mean difference and a correlation coefficient. The output of meta-analysis, of course, depends on the input – if one includes studies with serious methodological flaws, then the results yielded by the analysis will be misleading. However, some meta-analysts maintain that weaker studies can be included as long as one addresses the question of the effect of study methodological quality on the effect size. Meta-analysis has been used to ascertain, for example, the strength of a relationship between factors, the relative impact of independent variables and the overall effectiveness of interventions (Neil, 2006).³⁸ Examples of well-known published meta-analytic studies cited in this book are Köhnken et al.'s (1999) work on cognitive interview studies and Steblay's (1992) analysis of empirical literature on the weapon-focus phenomenon.

It becomes clear that no method for studying witnessing is 'the best' since different methods have different merits and defects. While the slide presentation is easy to carry out in the laboratory and lends itself to a good control of variables, staging an event in the laboratory is an easy way to attempt to simulate the dynamics

of a crime but comes with poor control of variables involved. Staging events out in the field allows the researcher good control of variables while case studies and archival studies are high on realism but poor on control of relevant variables. The dictum for psychological researchers is to ensure that their findings about the reliability of witness testimony are replicated across a range of paradigms, or to risk broad acceptance of their research results (Davies, 1992).

Unfortunately for the discipline of psychology and law, the great majority of eyewitness researchers do not seem to share the serious concern about the external validity of experimental simulation studies.³⁹ In a climate of 'publish or perish', the majority of researchers will, understandably perhaps, continue to rely on experimental studies of often questionable ecological validity, journals will continue to depend largely on such studies for their continued existence, eyewitness testimony 'experts' will continue basing their status (and fees) on having carried out and published such research and a minority will continue voicing their concerns about all this. This chapter emphasises the proposition that the discipline of psychology and law is better served by a combination of both sound laboratory research and fieldwork as well as archival research. It does appear that the few psycho-legal researchers who have expressed grave concern about the generalisability of a lot of experimental eyewitness research are researchers who have had first-hand experience of actual cases. The majority of those who apparently adhere blindly to experimental simulation as their only research method do not seem to consider familiarity with real cases important, or if they do, choose not to invest time and resources to achieve it by spending time in the field, whether with operational police and/or practising lawyers and/or ex-jurors and/or crime witnesses. One partial solution might be for psychology students to be granted credit points towards their degree courses for exactly such involvement in the field. Rather than adopt entrenched positions, psychologists in both camps will go a longer way in bridging the remaining gap with lawyers if they take the middle ground rather than the high moral ground.

The 'credibility problem' referred to became less serious by the late 1990s than it had been in the early 1980s, primarily because in more recent years many eyewitness researchers have made use of the simulated crime methodology or used real-life events instead of presenting subjects with pictures depicting a crime scene or face photographs of suspects. Such simulations have involved, for example, subjects viewing a video of a staged 'crime' or subjects 'coming across' a 'crime' being committed, being asked questions about what they have seen or witnessed and, where applicable, also being debriefed. As a result, better-designed applied testimony research, despite the limitations mentioned above, is not as scarce as it used to be, especially as more researchers have come to focus on 'system' variables rather than continue to report findings pertaining solely to 'estimator' (witness) variables as showing that a human witness is a limited-capacity processor of information (see below). Not surprisingly, legislators are increasingly heeding psychologists' empirical findings (McEwan, 2003:4).

4 VARIABLES IN THE STUDY OF EYEWITNESS MEMORY

Wells (1978) made an important distinction between ‘system’ variables (that is, those factors the criminal justice system can do something about, procedures used to enhance the accuracy of eyewitness testimony) that focus on the retrieval stage of memory and ‘estimator’ variables (that is, characteristics of the witness which influence witness accuracy that the criminal justice system cannot do anything about) that focus on the encoding and storage stages. Wells et al. (1999) stress the crucial importance of system variables because for them, ‘much of the problem with the accuracy of witness testimony owes to the system and the methods used to obtain the information from these witnesses’. While the distinction suggested by Wells is an important one when considering policy implications of research findings, it needs to be remembered that in the real world of crime victim and crime witnesses interviewed by police, the distinction between estimator and system variables is not always as clear cut as it appears. For example, the time when a witness is to be interviewed by particular police personnel is often the result of a little negotiation between the volunteer witness and police over the telephone to accommodate each other’s preferences. Similarly, ‘refreshing a witness’ memory’ is something that inevitably occurs as eyewitnesses discuss their experience with lawyers, friends, family members and others. However, it is also a common practice for the police officer who has the conduct of the case to ‘refresh the memory’ of a prosecution witness by ensuring that the witness has reviewed the statement he/she made to the police at the first possible opportunity before going into the witness box (Magner, 1995b:26). In the English case of *R v. Da Sylva* ([1990] 1 WLR 3; 1989 90 Cr App R 233), after entering the witness box a witness was allowed to refresh his memory by reading the statement he had made to the police a year earlier, a factor not addressed by psychologists (Magner, 1995b:29).

Drawing on a taxonomy of variables first used by Clifford (1981:21), Hollin (1989) categorised eyewitness memory variables under the heading of ‘social’ (attitudes, conformity, stereotypes, prejudice, status of interrogator), ‘situational’ (complexity of event, duration of event, illumination, time delay, type of crime), ‘individual’ (age, cognitive style, personality, race, sex, training) and ‘interrogational’ (artists’ sketches, computer systems, identification parades, mugshots, photofits). As Hollin pointed out, eyewitness researchers have been concerned with the effects of these variables at the stages of acquisition, retention and retrieval. Other attempts to classify eyewitness testimony variables have included Ellis’ (1975) distinction between ‘stimulus’ factors (for example, length of viewing time) and ‘subject’ factors (for example, sex of the witness) and Loftus’ (1981) distinction between ‘event’ and ‘witness’ factors. Clifford (1979) suggested the additional category of ‘interrogational’. In this context, it is worth noting that Wells’ (1978) ‘system’ variables overlap with Ellis’ (1975) ‘stimulus’ factors and Loftus’ (1981) ‘event’ factors, while Wells’ ‘estimator’ category overlaps with Ellis’ ‘subject’ and Loftus’ ‘witness’ category. Adopting Wells’ dichotomy, Memon, Vrij and Bull (2003) classify

estimator variables into seven categories: stable witness characteristics (for example, age, gender, race); malleable witness characteristics (for example, blood alcohol); style of presentation (for example, consistency and confidence); stable target characteristics (for example, facial distinctiveness); malleable target characteristics (for example, disguises); environmental conditions (for example, exposure duration); and, finally, post-event factors (for example, previous exposure to target).

In reviewing studies of eyewitness testimony, authors in the 1980s such as Goodman and Hahn (1987), Hollin (1989), Loftus (1981) and Penrod et al. (1982) drew upon the three memory stages of acquisition, retention and retrieval. These three stages have traditionally been identified in memory research and correspond to the stages involved in: (a) witnessing an event; (b) time taken before giving evidence; and (c) giving evidence. In reality, of course, these three stages are not distinct. For example, while waiting to give evidence, a witness may see a police artist's sketch of the suspect on television and/or may talk about the incident with other witnesses. As will be seen below, in the course of such exposure to information about the crime, a witness acquires information that becomes part of the memory to be retained for later recall. Furthermore, the terms 'event' and 'witness' variables are not always mutually exclusive. For example, 'type of event' and a witness' level of physiological arousal are related, while 'number of witnesses' can be both an 'event' and a 'witness' variable. Table 2.1 shows the variables considered in the literature reviews that follow below and in the next chapter under the categories of 'event', 'witness' and 'interrogational'.

Table 2.1 Variables in the study of eyewitness testimony by category

Event	Frequency, time, duration, illumination, type of event, weapon
Witness	Fatigue, physiological arousal, chronic anxiety, neuroticism, extroversion, reflection-impulsivity, need for approval/affiliation, morning-evening type, self-monitoring, field-dependence, breadth of categorising, levelling-sharpening, mood, alcohol, age, race, gender, schemas/stereotypes, physical attractiveness, whether also victim of the crime, confidence, whether witness is a police officer, collaborative testimony.
Perpetrator	Gender, body size, height, ethnicity, gait.
Interrogational	Retention interval, type of recall, efforts made to recall, leading questions, memory retrieval therapy, cognitive interview.

In considering classifications of such factors it should also be remembered that memory errors are of two types: errors of omission and errors of commission. Errors of omission stem from inherent limitations of the way the human memory is structured and processes information.

Before reviewing available empirical evidence that a number of factors impact on the accuracy of eyewitness testimony, it should be noted that the empirical literature on witness testimony deals almost exclusively with the accuracy of identification rather than non-identification or misidentification (see Twining, 1983, on the issue of identification and misidentification in legal processes). A small number of researchers have examined the impact on mock juror verdicts of non-identification, that is, when the witness says: 'No, that's not the person I saw'. According to Williams et al. (1992:152), a non-identification may be construed as a 'non-event' rather than as an important piece of evidence. Leippe (1985) reported that the probability of a defendant being found guilty by mock jurors in an experiment was reduced from 53 per cent to 14 per cent by a non-identifying witness even if it was in contrast to two witnesses who positively identified the defendant. It was also found that the impact of a non-identifying witness was completely negated if such a witness elected not to testify and the information was conveyed to the mock jurors by the lawyer. Finally, Bekerian (1993) rightly argued against the notion of a typical eyewitness situation or typical eyewitness because psychologists 'might be asked to identify one in court' (p. 575).

Eyewitness testimony variables can be classified into 'event', 'witness', 'perpetrator' and 'interrogational'.

5 VARIABLES THAT IMPACT ON EYEWITNESSES' TESTIMONY ACCURACY

There already exist a number of works that provide excellent reviews of the eyewitness literature.⁴⁰ The aim of the discussion of the literature that follows is to reach conclusions about the importance of a number of 'event' factors in eyewitnesses' accuracy, considering the findings in a broader sociolegal context as much as possible, drawing on contemporary criminology and relevant law. A literature review of the categories of 'witness', 'perpetrator' and 'interrogational' variables is the subject of the next chapter.

In *Neil v. Biggers*, 1972, the US Supreme Court outlined five criteria on which evaluations of eyewitness identifications should be based: certainty, view, attention, description and time. Interestingly, an experimental study by Bradfield and Wells (2000) found that each of the five *Biggers* factors contributes some amount to the overall impression of witness accuracy and, also, that the amount contributed by one factor is independent of the other factors.

Event Characteristics

Passage of time: the interval between witnessing an event and being questioned about it can vary from a few minutes to months and even years. When witnesses are asked to recall details a long time after they witness an event, they are allowed⁴¹

to refresh their memories from any notes they may have taken at the time, evidence that the law does somehow recognise the difficulty of remembering under such circumstances (McEwan, 2003:212). It is very well established in eyewitness testimony research that both children and adults forget things over time (Flin et al., 1992). In a Dutch study, Van Koppen and Lochun (1997) used archival data from official police records to examine both the completeness and accuracy of witnesses' descriptions of commercial robbery offenders. As would have been expected, it was found that more complete descriptions were associated with a shorter delay between the crime and the reporting of the description. Similarly, Odinet and Wolters (2006) reported that a longer retention interval (3 or 5 weeks) before initial testing resulted in lower eyewitness accuracy and lower confidence scores than one week's interval. The reader should note, however, that a person's memory of an event, of someone's appearance, can be wonderfully accurate weeks later or even longer. It is well established, of course, that recognition is more accurate than recall. The following case illustrates accurate eyewitness recall of an event at a busy airport on Christmas Day that helped police investigators convict a homicide offender.



CASE STUDY

A Christmas Day murderer who did not get away

On Christmas Day 1997 Jacqueline arrived at Larnaca International Airport in Cyprus on Alitalia flight AZ816 for a week's holiday in the sun. The island is a popular holiday destination for millions of European tourists every year so there were many flights that day. Jacqueline was due to return to France on New Year's Day. On 8 January 1998 the French embassy in Nicosia notified the Cyprus police that she had failed to return home and had been reported missing as she had made no contact and could not be contacted since she left for her holiday. The case shocked Cypriots who take pride in the fact that their country has one of the lowest crimes rates in the world. Intensive police investigations revealed that Jacqueline had caught a taxi from the airport. On 21 January 1998 a taxi driver saw Jacqueline's photograph in a newspaper and told the police he could remember which taxi driver had picked her up outside the airport while waiting in the taxi rank. Armed with the witness' description of the suspect and additional information he was able to recall with accuracy, such as the colour of the suspect's car, the police soon arrested the suspect who confessed to robbing Jacqueline of her valuables before killing her and disposing of her body. Later in the same year, the driver was convicted of homicide and sentenced to 20 years' imprisonment.⁴³

Frequency: in some cases a bank-teller has spoken to the suspect of an armed robbery when he/she came into the bank to carry out surveillance and/or to do a 'dry run', or a suspect may have been seen at least once before in the vicinity of premises that have been broken into. Powel and Thomson (1994)⁴² found that the greater the frequency of an event, the better people will remember it as having occurred and details about it. However, if people are asked to remember a specific occasion when a recurring event took place, the accuracy of recall decreases the more times it has occurred.

Time: remembering accurately when an event actually took place would add to the credibility of an eyewitness' recall of event information, including identification of a suspect alleged to have been involved in the event. A witness' recall of an event, or a description of an offender's face, exists in a time framework. Despite the fact that 'Time is a richly elaborated concept, one that is resistant to analysis' (Friedman, 1993:44), there is a limited body of literature on memory for time. Both life memory studies and laboratory studies have reported the 'forward telescoping' phenomenon. Forward telescoping refers to a 'tendency to give estimates that are too recent for events that are among the oldest in the range tested . . . Respondents seem to import events that really took place before the cutoff in the question' (Friedman, 1993:51). It has also been found that judgements of time are more accurate when there is a more temporary structure to an unusual interval than when people's activities are more uniform (Tzeng and Cotton, 1980); when two items belong to the same semantic category, such as 'sofa' and 'chair', and when two items are strongly associated, as in 'smoke' and 'tobacco' (Winograd and Soloway, 1985). A number of theories have been put forward to account for such findings (see Friedman, 1993, for a discussion). Friedman groups theories according to the type of information that each theory emphasises as the basis for memory of dates.

Duration: the time it takes to commit a particular crime can range from a few seconds to a few minutes or even longer. An assault may be over in a fraction of a second, an armed robbery of a bank or of a person in the street may well be over in less than a minute (Kapardis, 1989), while a brawl between two street gangs or an abduction or a rape could last for much longer. According to Williams et al. (1992), in *Neil v. Biggers*, 1972, the US Supreme Court accepted the proposition that there is a strong correlation between a witness' memory accuracy and an opportunity for the witness to observe. In fact, the same court 'accepted this notion as a criterion for judging every witness' reliability' (p. 143). In the English case of *R v. Turnbull* [1977] 65 Cr App R 242, Lord Widgery stated that a defining feature of 'good' quality witness identifications (as opposed to 'poor' ones) is that the witness had ample time to get a good look at the suspect. This commonsense belief is supported by the literature, as reported by Shapiro and Penrod (1986) in their meta-analysis of face recognition studies. In real-life situations, of course, it is not often the case that the victim of a crime, especially of such property offences as theft and burglary, will get a close look at the perpetrator's face. A survey of

836 members of the public and 477 undergraduates in Kingston, Ontario, found that duration of crime was rated by potential jurors as the fourth most important determinant of eyewitness identification accuracy out of 25 variables (Lindsay, 1994a:372). In an experiment by Clifford and Richards (1977) policemen were asked to recall details of a person who had approached and conversed with them for either 15 or 30 seconds. They found better recall in the 30 seconds than in the 15 seconds exposure to the target person. In view of the existence of selective attention, however, greater exposure duration to an offence will not necessarily mean greater accuracy. Early research into the importance of observation conditions and duration at Aberdeen University in Scotland by Shepherd et al. (1982) and more recent work by Memon et al. (2002a) found that prolonged observations make little difference to witness accuracy. However, while laboratory findings consistently show that the longer the time allowed an eyewitness to observe an event, the more the information is encoded and recalled, studies of real-life crime witnesses (for example, van Koppen and Lochun, 1997) have not found such a relationship. In support of van Koppen and Lochun, Fahsing et al.'s (2004) archival study of bank armed robbery eyewitnesses in Oslo, Norway, found that longer duration did not improve memory for offenders' basic features, namely, gender, build, age, height and ethnicity. It should be noted in this context that people tend to overestimate significantly short temporal duration, a tendency that is more likely to manifest itself when the event in question is complex or the person is stressed (Sarason and Stroops, 1978; Schiffman and Bobko, 1974). A bank-teller may say the robber pointed his sawn-off shotgun at him/herself for two minutes when, in fact, the time involved was no more than 30 seconds. In the Fahsing et al. study, however, CCTV footage provided an objective measure of the duration of each armed robbery examined.

Illumination: crimes take place around the clock and illumination, the amount of light available at the scene of the crime, is undoubtedly a relevant factor. Illumination was considered by the potential jurors in Lindsay's (1994a) survey as the fifth most important determinant of eyewitness identification accuracy out of the 25 variables examined. Kuehn (1974) reported that witnesses could remember less about an incident that took place at twilight rather than during the day or at night and, similarly, Yarmey (1986b) found that accuracy of incident details and recognition of the people involved was better during daytime than at the end of twilight or during the hours of darkness. Van Koppen and Lochun (1997) reported that the only factor that, to a significant degree, influenced the accuracy of commercial robbery eyewitnesses' descriptions of the offenders was the lighting conditions. The fact that a crime occurred at night, does not seem to discourage witnesses from having confidence in the accuracy of their testimony acquired under poor lighting conditions (see below). The ability to adapt to the dark can take up to 30 minutes depending on the intensity and duration of lighting conditions one was previously experiencing (Loftus et al., 1989:17). Consequently, eyewitnesses who experience

abrupt changes from one lighting condition to another can also have trouble seeing what actually took place. As Buckhout (1974) reminded his readers, crimes very rarely take place under ideal light conditions, or in close proximity or last long enough or, finally, free from other interference (p. 25). One can also add the important fact that actual witnesses may well be fatigued at the time of encoding, a factor that has been found to interfere with recall accuracy (Horne, 1992).

Wagenaar and van der Schrier (1994)⁴⁴ varied illumination and distance at which witnesses saw a person they were subsequently asked to identify. It was found that with moderately bright lighting in the evening, the identification of a person viewed at night in full moon at a distance of more than 3 metres is dubious. Similarly, Dutch psychologists De Jong et al. (2005) found a systematic increase of face recognition performance with increasing illumination, the ideal light condition being 15 lux. Experimental psychologists are well suited to test the accuracy of witnesses claiming to have seen the features of someone some distance away under poor light. Buckhout (1974) mentions a case in the United States in which a policeman testified seeing the defendant, a male African-American, shoot a victim as the offender and the victim stood in a doorway 120 feet (36.5 m) away. Checking light conditions at the scene of the crime for the defence, Buckhout found that the amount of light was less than a fifth of the light from a candle and it would have been impossible for someone to see a face that far away. Not surprisingly, perhaps, when the members of the jury went to the scene of the crime and asked one African-American person to stand in the doorway they were unable to make out his features and subsequently acquitted the defendant.

Type of event: the range of offences witnessed in real life is much broader than that which has been studied by psychologists in simulated or field studies. Findings from a survey (unpublished) by the present author for the Victoria Police in Australia of archival data on 1636 real-crime victims/witnesses interviewed by specialist police personnel of the Criminal Identification Squad in Melbourne, for the purpose of constructing a composite colour computer image of the various suspects during a nine-month period in 1994, revealed that such interviews mainly involved burglary (19.8 per cent), theft (16.8 per cent), armed robbery (12.2 per cent), assault (11.1 per cent), wilful indecent exposure (9.4 per cent) and deception (4.6 per cent). It was also found that females were seven times more likely than males to have provided descriptions of suspects in rape and indecent assault and three times more likely to do so in abduction cases. Interestingly enough, 16 per cent of the witnesses were unable to remember enough details about the suspect's face for the police to construct a colour computer-face composite image to assist the investigators to apprehend the offenders (see also chapter 8). Furthermore, failure in this context was not related to the type of crime involved. There is some limited evidence that the more serious the crime witnessed (for example, petty theft vs murder), the more likely an identification will be made in a subsequent line-up, especially by people aged 18–30 years (Searcy et al., 2000). Unfortunately,

Searcy et al. confounded the type of crime with the type of suspect by telling their subjects the murder suspect had a criminal record, whereas the minor theft suspect was not so described.

Weapon: firearms, especially hand guns, feature in crime in the United States (Cook, 1983) to a much greater degree than they do in the UK, Australia or New Zealand (Cantor et al., 1991; Chappel et al., 1988). The use of a weapon to commit a crime is generally considered an aggravating factor when courts come to impose sentence on a convicted defendant (Thomas, 1979). Experimental psychologists have examined the effect of a weapon in the hands of an offender on witness testimony. A weapon, of course, does not have to be a loaded firearm or a knife – a broken bottle, a stone, a piece of wood or a syringe and so forth are also defined as ‘weapons’ in many jurisdictions. As we shall see later on, while laboratory studies support the weapon focus effect (that is, that an eyewitness’ vision is focused on the weapon held by an offender), archival studies do not (Stebly, 1992; Behrman and Davey, 2001).

Physiological arousal: the presence of a weapon is undoubtedly stressful for both victims and bystanders, a factor that generally increases their level of physiological arousal. There is no doubt that subjects in simulation studies, whether in the laboratory or field, are unlikely to experience the varying degrees of emotional arousal, stress or the trauma experienced by real-life witnesses (whether as victims or bystanders) to such serious crimes as assault, rape, armed robbery, abduction and homicide. For example, researchers have found that witnesses to bank robberies are concerned about being taken hostage and/or receiving serious injury, even death (Christianson and Hubinette, 1993:372). Potential jurors in Canada have been found to consider stress and emotional arousal during the crime as the eleventh most important determinant of eyewitness identification accuracy out of 25 factors (Lindsay, 1994a:372). The resulting psychological trauma is recognised in law: a crime victim/witness can sue for damages in a civil suit; in various countries there exist schemes which aim, inter alia, to compensate the victim/witness for ‘pain and suffering’, and some organisations such as banks have a policy of giving time off work and providing psychological counselling to their employees who have been victims of or witnessed an armed hold-up at work (see Leeman-Conley and Crabtree, 1989).

Psychologists have long assumed that people’s cognitive efficiency is related to their level of emotional tension arousal. More specifically, Yerkes and Dodson (1908) proposed an inverted U-form relationship between these two factors whereby cognitive efficiency is at its highest at a moderate level of arousal. Cognitive efficiency is said to decline if the arousal level increases beyond an optimal point. Easterbrook’s (1959) cue-utilisation theory has been used to account for what has come to be known in psychology as the ‘Yerkes–Dodson law’. According to Easterbrook, as one’s level of emotional arousal increases, the range of cues one can attend to and utilise decreases. A moderate level of arousal is conducive for attention and recall because one is in a position to attend to relevant cues and

exclude irrelevant ones. However, as arousal increases beyond a certain point as a result of stress, the number of cues (including relevant ones) that can be attended to are reduced. Mandler (1975) extended Easterbrook's argument by positing that the relationship between emotional arousal and cue utilisation is determined by our autonomic nervous system which allows for less attention and cognitive processing when one is highly aroused (Eysenck, 1982). Thus, a highly aroused (stressed) individual will focus on fewer cues in their environment for the simple reason that a lot of their energy will be expended on their anxiety. One serious limitation of such studies is a failure to take into account an individual's degree of neuroticism, which appears to mediate the alleged relationship between people's arousal and cognitive efficiency (see below).

Some psychologists have advocated a similar relationship between tension arousal and memory (Deffenbacher, 1983; Loftus, 1979; Loftus and Doyle, 1987). However, as will be seen below, this view has been seriously challenged. On the basis of a literature review, Christianson (1992:279) challenged the unidimensional view of a simple relationship between emotion and memory. He concluded that eyewitness memory for stressful emotional events 'should be understood in terms of complex interactions between type of events... type of detail information... time of test... and retrieval conditions...' and questioned whether the Yerkes–Dodson law is a useful theory in eyewitness identification research (p. 303).

The arousal-memory relationship is best understood in terms of complex interactions between type of event, time of test, memory test and retrieval conditions.

Violent/traumatic event: the available literature on memory for violent or traumatic events has reported conflicting findings. On the one hand, experimental studies support the inverted U relation between arousal and eyewitness performance; in other words, a high level of stress impacts adversely on memory (see Deffenbacher, 1983; Loftus, 1979). Interestingly, this also appears to be the view shared by the majority (79 per cent) of the US experts on eyewitness testimony surveyed by Kassir et al. (1989). Other researchers, however, utilising real criminal cases, have found that, contrary to what the experimental literature would predict, a high level of stress is good for memory (Yuille and Cutshall, 1986, 1989; Yuille and Tollestrup, 1992). Yuille and Cutshall (1986) reported a study of witnesses to a homicide that found that witnesses indicating the highest level of stress had a mean accuracy of 93 per cent when interviewed by police two days later and 88 per cent when interviewed by researchers four to five months later. MacLeod and Shepherd (1986) analysed data pertaining to 379 statements made by assault victims and compared those where physical injury had been sustained and those involving no injury. They found some evidence that female eyewitnesses were likely to report less details than male eyewitnesses when there was injury to the victim to report.

Yuille and Cutshall (1989) have argued that: (a) laboratory studies of the effect of stress on recall do not adequately simulate real traumatic experiences; (b) subjects in such experiments are not emotionally involved; (c) the memories reported

by the two sets of studies are qualitatively different; and (d) the memory of traumatised witnesses is highly accurate and stands the test of time. For Yuille and his colleagues (see Yuille and Tollestrup, 1992) the difference between the two types of methodologies is that real-life traumatic events impact on the witness in such a way as to narrow the witness' attention to details of core aspects of an incident that are stored and remembered for long afterwards. Consequently, laboratory studies cannot be said to have demonstrated that memory for traumatic events is unreliable. Indeed, experiments with the potential to test this hypothesis would probably be ruled out on ethical grounds.

In evaluating the findings from the real-life stressful events it needs to be remembered that, as Christianson and Hubinette (1993:366) point out, the Yuille and Cutshall study is limited by the mere fact that it only examined a single stressful event, and did not include an appropriate control event in support of their conclusion regarding the stress-memory relationship. In addition, unlike laboratory studies, Yuille and Cutshall ignored errors of omission when calculating their performance scores, witness recall of details about the personal appearance of the perpetrator of the crime, for example, was incomplete, as in laboratory studies and, finally, their figures may well have been inflated by the fact that only witnesses with complete or accurate memory volunteered to participate in their study (Christianson and Hubinette, 1993:366).

Neisser and Harsch's (1992) study of eyewitnesses to the Challenger explosion 32 months later reported that eyewitnesses' recollections of place, activity and time contained only 30 per cent correct answers, 27 per cent partially incorrect answers and 42 per cent totally incorrect answers (1 per cent allowance for rounding of figures). Christianson and Hubinette (1993) reported an interesting study of witnesses to 22 bank robberies. The witnesses comprised 20 bank-teller victims, 25 fellow employees, 13 customers and 8 who had an earlier experience of a bank robbery. In considering their findings it is worth remembering that bank robberies are significantly more likely to involve the use of firearms to intimidate the victim/s than robberies of soft targets; can last for up to 3 minutes; often involve older, more experienced criminals; tellers are usually instructed to comply with the demands made by robbers and, consequently, victims are much less likely to sustain physical injuries than is the case with robberies of 'soft' targets, such as family-run corner shops in which the victim is more likely to resist the attack, for example (see Kapardis, 1989). Christianson and Hubinette (1993) found that teller-victims were no more emotionally aroused than bystanders and that, in general, information about such an emotional event is retained for a lengthy period of time (p. 375). Also, witnesses' recall of robbery details was consistent with what they had told the police, irrespective of whether they were victims or bystanders; recall was more accurate about such features of the crime as action, weapon and clothing but, contrary to what would have been predicted on the basis of the 'flashbulb' memory theory (see below), recall was less accurate as far as such specific details of robberies as date, time and other people are concerned. Finally, Christianson

and Hubinette concluded that self-rated emotional stress did not appear to be strongly related with memory performance (p. 375). Similarly, when Turtle and Yuille (1994) compared the eyewitness testimony of victims and bystanders they found no significant differences in their reports.

One significant strength of the Christianson and Hubinette (1993) study is that it was based on a relatively large number of real-life violent events and numerous witnesses. By comparison, the Yuille and Cutshall (1986) study was based on one event and 13 witnesses. Also, as Yuille and Tollestrup (1992) point out, robbery is a crime that takes place frequently in society, is often witnessed by many who have not seen the robber/s before and, also, it is a crime that traumatises both victims and bystanders. For these reasons robbery is a suitable event-type for testing the emotional arousal–memory hypothesis (Christianson and Hubinette, 1993:376). Studies of such real traumatic events can be criticised for relying exclusively on retrospective self-reports of emotion and fear and for using a measure of memory that is not a measure of retention (Christianson and Hubinette, 1993:375). As the same authors point out, their own study would have been methodologically better if they had measured witnesses' memory of robbery details immediately after the crime was committed. The limitations of their study notwithstanding, the findings reported by Christianson and Hubinette (1993), Turtle and Yuille (1994) and Halford et al. (2005) contradict the view shared by a large number of eyewitness testimony experts in the Kassir et al. (1989) survey.

In their analysis of 1001 exposures of real-life eyewitnesses to identification parades in England, Halford et al. (2005) compared the accuracy of 113 victims and 42 bystanders and found the former were significantly more likely to select the suspect in a line-up. They also found that witnesses of violent crime selected suspects significantly more often than did witnesses to non-violent crime. They also compared witnesses who had been subject to violence and witnesses who had not and found no significant differences between them as far as line-up identification accuracy was concerned. The researchers then interrogated their police archival data further by comparing victims who were rendered unconscious and those that were not and found that the former were less likely to select the suspect in a line-up, presumably because in some cases victims are attacked from behind. The Halford et al. (2005) study shows that real-life victims and victims of violence are more accurate eyewitnesses than bystanders and victims of non-violent crime. Generally speaking, of course, crime victims in general and victims of violent crime in particular get a closer look at their offenders than do bystanders or victims of non-violent crimes. Consequently, it is not clear whether their higher line-up identification accuracy is attributable to their levels of stress or their closer proximity or both. It should also be noted in this context that bank-tellers are routinely trained in how to best deal with an armed robbery and this may explain the finding reported that bank robbery victims do not differ in their level of arousal and description accuracy from bystanders. Pointing out possible intervening variables is not meant to detract from the findings of Halford et al. (2005). Their

findings should be replicated by other researchers in other countries and with other major crimes.

The conflicting findings reported by archival studies on the one hand and laboratory studies on the other are to some extent attributable to differences in methodology (see Christianson et al., 1992). Christianson and Hubinette (1993:376) point out that some studies (Reisberg et al., 1988; Yuille and Cutshall, 1986, 1989) have focused on memory accuracy, while others (Neisser and Harsch, 1992) have been concerned with the decline of memory over time and inaccuracy in terms of errors of commission. Similarly, differences in emphasis also go some way towards explaining conflicting findings reported by laboratory studies. For example, Christianson (1984) and Heuer and Reisberg (1990) were concerned with the persistency of emotional memories, while others (Clifford and Hollin, 1981; Clifford and Scott, 1978; Loftus and Burns, 1982) measured errors of omission. Thus, ‘the data in both real-life studies and laboratory studies show good and poor recall depending on how recall is tested’ (Christianson and Hubinette, 1993:376). When examining the relationship between arousal and performance and comparing victims and bystanders, Turtle and Yuille (1994) did not take into account such intervening variables as the distance of a subject from the event, or the duration of the crime or the gender of the witness (MacCleod and Shepherd, 1986) which might have confounded their results.

We can tentatively conclude that findings from archival studies cast doubt on laboratory research findings that high levels of stress impact adversely on eyewitness accuracy.

Christianson (1992:302) concluded that there are no real grounds for a simple relationship between intense emotion and memory – ‘the view that the more negative the emotion or stress, the poorer the memory is incorrect...’ – and that particular details of core aspects of a violent event and also information about circumstantial details are less susceptible to forgetting (p. 303). Yuille et al. (1994) had 120 trainee (probationer) constables at the Metropolitan Police Training Centre in Hendon, England, experience a stressful or non-stressful occupational simulation (a ‘stop-and-search’ scenario) as participants or observers and tested their recall after 1 or 12 weeks. It was found that stress decreased the amount recalled but improved both accuracy and resistance to decay over time. The resistance to decay by eyewitnesses to stressful events may well be attributable to such witnesses going over the experience in their minds, that is, rehearsal. Wells et al. (1999) concluded their review of the literature stating that ‘significant events leave an impression of indelibility but not an indelible impression’ (p. 65). The arousal–memory relationship is, thus, best understood in terms of complex interactions between type of event, time of test, memory test and retrieval conditions. In conclusion, therefore, the Yerkes–Dodson (1908) law does not adequately describe the relationship between memory and arousal (p. 303). We can tentatively conclude that findings from archival studies cast doubt on laboratory research findings that high levels of stress impact adversely on eyewitness accuracy.

Weapon focus: as already mentioned above, the presence of a weapon in the context of a criminal offence is, without doubt, stressful for victims and bystanders

alike. Loftus et al. (1987a) presented subject-witnesses with a series of slides depicting an event in a fast-food restaurant. Half of the subjects saw a customer point a gun at the cashier; the other half saw him hand the cashier a cheque. The researchers recorded the subjects' eye movements while viewing the slides. It was found that subjects made more eye fixations and for a longer duration on the weapon than on the cheque and that accuracy of recall was poorer in the weapon condition; in other words, the researchers documented the 'weapon focus' phenomenon.

Maass and Köhnken (1989) simulated the 'weapon effect' in an experiment in which 86 non-psychology students were approached by an experimenter who was holding either a syringe or a pen and either did or did not threaten to administer an injection. They found that exposure to the syringe decreased lineup recognition while enhancing the accuracy of recall for hand cues to a statistically significant degree. The 'weapon effect' reported is explainable in terms of witnesses' level of physiological arousal narrowing their attention and resulting in poor memory of peripheral details of the event in question. Support for the 'weapon effect' was obtained by Kramer et al. (1990b) who had witness-subjects (college undergraduates) confronted with the sight of a man carrying a weapon during an assault in which the victim was approached by an assailant who broke a liquor bottle over his head.

According to Kramer et al. (1990b:183), consistent with a number of modern theories of attention, a weapon can be seen as a salient object that demands a certain amount of attention from a witness. Kramer et al. concluded that the presence of a weapon reduces the accuracy of a witness' memory of the features of the person carrying the weapon and the more afraid someone is of the weapon the more they will remember about the offender's hand and the less about his face. Some support for Kramer et al.'s conclusion is to be found in Steblay's (1992) meta-analytic review of 12 studies, permitting 19 tests of the weapon focus hypothesis. Six of the tests yielded a significant difference, as would have been predicted between weapon-present and weapon-absent conditions. However, 13 of the tests showed no significant difference. Steblay's analysis showed that as far as the identification accuracy in a lineup is concerned (a most important piece of evidence from the point of view of both the police investigation and the criminal trial), the weapon-focus effect was small. The weapon-focus effect was stronger for accuracy of featural description. Steblay (1992:422) concluded that the weapon-focus effect is significant and 'a worthwhile focus for research'. The weapon-focus effect has also been demonstrated with children (Davies et al., 2007; Pickel et al., 2008). Interestingly, the weapon-focus effect is not found if carrying the particular weapon is consistent with the occupation of the person presenting it, such as a police officer holding a handgun; in other words, the absence of the weapon-focus effect is due to the lack of surprise, it occurs when the presence of a weapon is inconsistent with an activated schema (Pickel, 1998; Pickel et al., 2008). Research evidence indicates there is a need to also differentiate the type of weapon when examining

Conflicting findings have been reported about the weapon focus effect by laboratory studies and archival research into real-crime witnesses accuracy.

the weapon-focus phenomenon. In their study of armed bank robbery eyewitnesses in Oslo, Norway, Fahsing et al. (2004) found the opposite relationship between type of weapon and witness accuracy than would have been expected; more specifically, in terms of overall accuracy, exposure to firearms was associated with significantly better eyewitness descriptions than was exposure to knives, especially regarding such basic features of offenders as gender, height, build, age and ethnicity. There is a need to more precisely identify the mechanics of the process in forensically relevant settings. Investigating whether weapons automatically capture attention, Pickel et al. (2006) replicated the weapon-focus effect and also found that: (a) subjects can indeed avoid focusing on the weapon if they are instructed to focus on the person and not to fix their eyes on the weapon in his hand; and (b) their ability was unaffected by weapon unusualness and elevated levels of arousal. Another study of the role of attention in the weapon-focus effect by Hope and Wright (2006) also replicated the weapon-focus effect and found that both unusual and threatening objects command attention and the significance of a weapon may reduce the witness' description accuracy of the target. Interestingly, it has also been found that the mere presence of an unusual object, such as a stalk of celery has more influence on the accuracy of eyewitness testimony for the perpetrator's face than if the person behaves in a menacing manner (Mitchell et al., 1998; Pickel, 1998).

As is sometimes the case with research, however, an archival study by Behrman and Davey (2001) found no support for the weapon-focus effect, calling into question the external validity of laboratory studies of the alleged phenomenon. Further evidence against the weapon-focus effect has been reported by Halford et al. (2005) who found that real-life eyewitnesses who had viewed a gun, knife or other weapon in the possession of the offender were significantly more likely to accurately identify the suspect in an identification parade than weapon absent witnesses. We can conclude that: the weapon-focus effect has been found by a number of studies, with a variety of weapons and with both adults and children; that a knife in the hand of a robber attracts more attention by armed robbery victim witnesses than a firearm; the weapon-focus effect is consistent with a threat interpretation and is not found if the element of surprise from the point of view of the eyewitness is lacking because there is no schema incompatibility between the carrying of the gun and the category of person carrying it; and, finally, subjects can avoid focusing on the weapon and focus on the person instead if they are instructed to do so in advance. However, the findings just mentioned become problematic due to conflicting findings reported by the three archival studies by Behrman and Davey (2001), Fahsing et al. (2004) and Halford et al. (2005) that have found no support for the weapon-focus effect. Once again, more forensically relevant experimental simulation studies and more studies of real-crime victim-witnesses that will take into account more intervening variables are required before the issue of conflicting findings is settled. Finally, as far as potential jurors' belief about the importance of weapon focus as a determinant

of eyewitness identification accuracy is concerned, Lindsay (1994:372) found that it ranked 13 out of 25 variables.

Flashbulb memory: Brown and Kulik (1977) put forward the notion of a ‘flashbulb’ memory to refer to cases when a most significant, unexpected event, such as the shooting of John F. Kennedy in 1963, results in rather vivid, detailed and accurate memory traces of all that was observed at the time (see Winograd and Neisser, 1992, for a discussion of flashbulb memory research). According to Morse et al. (1993), psychologists have long been interested in flashbulb memories. They cite an early study by Colgrove (1899), in which people were asked to recall when they heard of President Lincoln’s death 33 years earlier. Colgrove found that the majority (71 per cent) reported they had vivid images of the moment at which they heard of that death.

Other researchers have reported that ‘flashbulb’ memories are not always accurate (Christianson, 1989; McCloskey et al., 1988; Neisser, 1982). They have been found to be vivid for John F. Kennedy’s assassination but less vivid for Robert Kennedy’s and Martin Luther-King’s assassinations and even less vivid for the Senate Hearings for confirmation of Clarence Thomas to the US Supreme Court in October 1991 (Morse et al., 1993). Emotion was found to have no significant effect on memory in a study of people’s recollection of the space shuttle Challenger explosion (Harsch and Neisser, 1989) and in a study by Christianson (1989) of people’s recollection of the assassination of Swedish Prime Minister Olaf Palme. In other words, ‘flashbulb’ memory studies do not consistently support the view that there is a positive relationship between accuracy of recall and emotional stress.

Wright (1993) surveyed 247 students at three sessions (2 days (N = 60), 1 month (N = 76) and 5 months (N = 111)) about the Hillsborough stadium disaster in England when, in the early stages of the Football Association semi-final between Liverpool and Nottingham Forest, an influx of people through the back of the Liverpool terraces resulted in 95 people at the front getting crushed to death. Subjects rated on a seven-point scale their emotional reaction, soccer enthusiasm, how important they felt the event was for them personally and for society (in the third session subjects were not asked about importance for society), their circumstances when they heard about the tragedy and of what it reminded them (Wright, 1993:131–2). Wright defined a ‘flashbulb’ memory in terms of whether subjects recalled either where they were, who they were with or what they were doing at the time. He found that most of his subjects had ‘flashbulb’ recollections of the event. It was also found that personal importance and emotional impact became more significant over time, supporting a reconstructionist explanation. Wright concluded that his results support a reconstructionist explanation rather than Brown and Kulik’s (1977) ‘special mechanism’ idea. It would appear that how we learn of shocking news determines our memory of particular news items. Bohannon et al. (2007) examined different people’s

There are contradictory findings about ‘flashbulb’ memory.

flashbulb memories of shocking news about the Challenger explosion, the death of Princess Diana, Pearl Harbour and the Iraq bombings, with delay intervals ranging from 2 weeks to 50 years. They grouped subjects according to the source of their discovery (media vs person), affect at encoding (calm vs upset) and recounts (few vs many). They found that 'media' subjects remembered more facts but 'person' subjects remembered more of their personal discoveries. Talarico and Rubin (2006) compared flashbulb memories of the September 11 terrorist attacks and of everyday memories of the preceding weekend, using undergraduates as subjects. They found that memories of both declined over the following year but subjects' ratings of recollection of vividness were consistently higher for flashbulb than for everyday memories. Talarico and Rubin concluded that flashbulb memories are not extraordinarily accurate but differ from everyday memories in a number of significant ways. In considering studies of flashbulb memories it needs to be remembered that the defining feature of such memories is 'the undue confidence with which these memories are held' (Weaver, 1993:39).

It would appear that while a strong emotional experience enhances one's memory for salient details, no evidence has so far been reported that flashbulb memories are unusually accurate and how we learn of shocking news determines our memory of particular news items. Also, it should be noted here that the accuracy of people's recall of such an important event as the assassination of a US president, or a major terrorist attack, or a major soccer tragedy in the UK is impossible to determine because of the inevitable post-event interference (see below) by the substantial media coverage usually accorded such events. Independent of the stressful nature of a witnessed event, Loftus et al. (1989) drew attention to chronic anxiety as an attribute that can cause a person's attention to be focused on such other concerns as to fail to adequately perceive event details, resulting in inaccurate testimony. Therefore, the next chapter, *inter alia*, considers the importance of a number of personality characteristics of the witness that are said to influence accuracy of identification. The flashbulb memory hypothesis is that witnessing a stressful event is conducive for accurate testimony. There is also the notion that highly emotive and traumatic events are repressed. However, the review by Pope et al. (1999) of 33 studies of memory for traumatic events found that traumatic amnesia is a rare phenomenon and when it occurs it is explainable by reference to other causes. The vexed issue of repressed memories and accuracy of eyewitness testimony is discussed in the next chapter.

CONCLUSIONS

Eyewitness testimony is of crucial importance in the investigation of a crime, the decision to prosecute a suspect and at the trial. Since the turn of the century there has been concern about the limitations of eyewitness testimony. More empirical studies have been reported in this than in any other area of psycholegal research.

Interestingly, the general public, police officers, jurors, judges and university students of psychology and law have a rather poor knowledge of the topic. The available empirical literature on eyewitness testimony accuracy testifies both to limitations of the cognitive processes of attention, perception and memory and to cognition being a dynamic mental process.

The empirical studies considered in this and the next chapter show that there are no simple, straightforward answers to a question by lawyers such as: How good is visual memory? Attempts to classify eyewitness testimony variables have been plagued by the difficulty that categories used are not necessarily mutually exclusive. Wells' (1978) classification into 'estimator' and 'system' variables is no longer adequate. The taxonomy provided in this chapter encompasses all the categories of variables shown to relate to eyewitness recall accuracy, namely 'event', 'eyewitness', 'perpetrator' and 'interrogational'.

Even though the quality of psychological studies of eyewitness identification accuracy has improved since the late 1980s, dogmatism is unwarranted when it comes to deciding what particular methodology to use; the fact is that no single method is the best and every effort should be made to replicate findings across a range of paradigms. Caution should thus be exercised in extrapolating findings from controlled studies to real-life situations. Also, the reader needs to be aware that, as the studies in this and the next two chapters show, many psychologists have focused on the limitations of eyewitness memory. At the same time, a very small but widely publicised number of miscarriages of justice due to witness misidentification has helped to increase people's scepticism regarding the capacity of crime victims/witnesses for accurate recall. There is a danger of exaggerating that scepticism. To do eyewitnesses justice one needs to also bear in mind that, as Lindsay and Read (1994) put it: 'It is important not to exaggerate the fallibility of human memory. Memory is often wonderfully detailed and accurate' (p. 293). With this caveat in mind, the review of the literature on a number of 'event' characteristics, including frequency, duration and illumination, shows they impact significantly on witness' recall accuracy. However, laboratory and real-life studies of the 'weapon-focus effect' and the impact of stress on recall have reported conflicting findings, highlighting the importance of intervening variables and the need for psychological researchers to combine different research methods and for more research into real-crime victim witness accuracy.

REVISION QUESTIONS

- 1 What are three important memory processes?
- 2 Which research methods have been used to study eyewitness testimony accuracy? What are the merits and defects of each one?
- 3 How can eyewitness testimony variables be categorised?
- 4 What is the relationship between arousal and memory?

- 5 What do we know about the 'weapon-focus' phenomenon?
- 6 What does the empirical evidence on 'flashbulb' memory indicate?

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3

EYEWITNESSES: THE PERPETRATOR AND INTERVIEWING

CHAPTER OUTLINE

- Witness characteristics 58
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The most important reason why identification of familiar suspects is not reliable, is that it is very easy for witnesses to lie about this, whereas there is hardly any valid test for their claims. This is especially a problem in war crime trials, because . . . in people's perceptions those wars are not over yet.

(Wagenaar, 2008:3)

Vulnerable witnesses may be the victims of negative ideologies and unhelpful societal assumptions, so that an effective strategy involves challenging the culture as well as the law.

(Birch, 2000:224)

The main challenge for those of us who work with survivors of child sexual assault is to ensure that our practices do not compromise either the legal or therapeutic process. We must be aware of the problems inherent in working with memory and in particular, guard against contaminating the process of recall.

(Broughton, 1995:95)

INTRODUCTION

Psychologists have paid very little attention to the influence of individual differences in personality and their effects on identification (Hosch, 1994:328). Hosch attributes this lack of research to the facts that: (a) psycholegal researchers in the field have a background in social or cognitive psychology; and (b) the acceptance by many psychologists of Wells' (1978) argument and the focusing on system rather than on estimator variables in order to increase the practical usefulness of their work (p. 328). Let us, therefore, take a close look at the empirical literature on witness personality, demographic and other characteristics and their relationship with accuracy of eyewitness memory.

1 WITNESS CHARACTERISTICS

Neuroticism: Bothwell et al. (1987a) found that as arousal level increased from low to moderate to high, the identification accuracy of witnesses classified as low on neuroticism increased. The reverse was found for witnesses high on neuroticism. It would appear, therefore, that failure to control the subject's neuroticism will compound any relationship between arousal and witness recall accuracy.

Extroversion: in examining the importance of one's extroversion (see Eysenck, 1982), researchers must take into account the following facts: (a) time of day is important because introverts reach their arousal peak sooner than extroverts; and (b) people's memory performance varies depending on the time of the day and the type of memory called for. Thus, if immediate or short-term memory, or verbatim and ordered memory, or if shallow processing of material is required, the morning is better. If what is called for is delayed memory, prose memory and semantic or deep processing, then the evening is better (Diges et al., 1992:317).

Reflection-impulsivity: another personal characteristic that appears to be related to eyewitness accuracy is reflection-impulsivity (see Kagan et al., 1964).¹ A reflective individual is someone who has a strong tendency to consider a number of possible answers to a question before responding. Thus, in being asked to decide whether the culprit is in a line-up, an impulsive individual will take less time to decide than a reflective one and his/her correct line-up identification (see chapter 9 in this volume) will correlate with speed of identification (Sporer, 1989; Stern and Dunning, 1994).

Need for approval/affiliation: human beings vary in the extent to which their everyday lives are characterised by grouping. This process of grouping is also known as 'affiliation'. Affiliation refers to 'forming associations involving cooperation, friendship and love' (Davenport, 1992:123). Schill (1966) reported that persons high in need for affiliation (n-Aff) showed greater perceptual sensitivity to face-related stimuli than those low on n-Aff (Atkinson and Walker, 1955) and, similarly,

An individual's degree of neuroticism, extroversion, reflection-impulsivity, need for affiliation and other personality attributes are important in understanding the accuracy of eyewitness testimony.

persons high in need for approval (n-App) performed better in a memory task for faces than those low in n-App.

Morning–evening type: different people prefer different schedules in their daily lives. More specifically, morning-type individuals (known as ‘larks’) are said to reach their arousal peak three hours before the evening-type ones – known as ‘owls’ (Kerkoff, 1985). In fact, in free recall, larks perform better in the morning and the owls perform better in the evening (Lecont, 1988).² Where a person is located in the ‘morningness–eveningness’ dimension can be measured by Horne and Ostberg’s (1976) questionnaire.

In an interesting experiment Diges et al. (1992) showed morning- and evening-type subjects a very brief film of a traffic accident at 10 a.m. or 8 p.m. Utilising two measures of arousal from McNair et al.’s (1971) *Profile of Mood States*, they found that the main factor affecting witness testimony is time; in other words, accuracy of recall is significantly better when people are more aroused. Diges et al. also found, however, that there was a systematic superiority of the 10 a.m. (testing time) as compared with the evening test at 8 p.m. Finally, evening-type subjects in the morning test failed to discriminate as much accurate from irrelevant information. The authors explained the last finding in terms of evening-type individuals’ tendency to be extroverts (Kerkhoff, 1985) and thus more assertive, self-confident and seem to have a lower decision criterion when they recall details of an event. Consequently, they were found to write longer reports, to perform hurriedly and make mistakes when trying to integrate the information (p. 320). It is obvious that researchers are a long way from closing the chapter on individual differences in arousal and witness accuracy.

Intelligence: no relationship has been found between intelligence (when it falls within normal ranges) and the accuracy of eyewitness testimony (Brown et al., 1977; Feinman and Entwistle, 1976). As far as people with intellectual disability are concerned, even though they appear to have broad deficits in memory encoding, storage and retrieval, they can give accurate witness testimony in some circumstances, which includes being asked open, free recall questions (Kebbel et al., 2004). One would normally expect that an eyewitness with intellectual disability testifying in court would likely feel distress, especially as certain questioning techniques employed by lawyers (for example, using double negatives) are potentially confusing for such witnesses (p. 25). It is for this reason that in some countries special measures are available for such persons. To illustrate, section 17(1) of the *Criminal Justice Act 1991* in England and Wales provides that any person who would suffer fear or distress in connection with testifying in court is eligible for special measures, irrespective of any disability being proven (McEwan, 2003:214). Furthermore, there is a presumption in s.17(4) in favour of special measures for complainants in sexual cases (p. 214). Despite such legal provisions, it comes as a big disappointment to learn that when some lawyers cross-examine witnesses who have documented intellectual disabilities, including victims of assault and sexual assault, they question them in the same way as they question witnesses from the

general population; in other words, they do not adapt their questioning behaviour, thus increasing their suggestibility (Kebbel et al., 2004).

Self-monitoring: Snyder (1979, 1987) has distinguished between persons who are high self-monitors (HSMs) and low self-monitors (LSMs). This attribute refers to 'the extent to which people observe, regulate and control their public presentation of self in social situations and in their interpersonal relationships' (Hosch, 1994:329–30). Since HSMs are more attentive to the social environment, one might expect them to be more accurate eyewitnesses than low LSMs. In a number of studies Hosch and his co-workers have examined differences in eyewitness identification as a function of differences in one's degree of self-monitoring ability.³ Hosch (1994) concluded that while HSMs appear to be more accurate (but no more confident) on identification tasks when they are the 'victims' of a staged crime instead of bystanders (p. 332), the relationship between witness accuracy and degree of self-monitoring ability 'is not necessarily a simple one' (p. 332). Snyder (1987) has argued that individual differences in self-monitoring are biologically-based. In support of this view, Pannell et al. (1992)⁴ found significant differences in evoked potentials between HSMs and LSMs in a facial recognition task, suggesting important differences in the way the two types of individuals search their memory and decide such a task.

Cognitive style: Kogan (1971) defined 'cognitive style' as a characteristic way of perceiving, storing, transforming and utilising information. A widely cited example of cognitive style in psychology is field dependence/field independence. This construct describes one's ability to discriminate parts from the whole in which they are embedded. The same construct is referred to as *articulated vs global psychological differentiation* (Hosch, 1994:341). Field independence has been theoretically linked with facial identification accuracy. Studies that have tested the hypothesis that field-dependent persons are better at recognising faces than field-independent ones because they are generally more attentive to faces put forward by Witkin et al. (1962, cited by Hosch, 1994:342), have reported conflicting findings.⁵ Durso et al. (1985) reported that field-dependent persons are more likely than field-independent ones to confuse memories of actual and illusory events. This finding lends support to the view that field-dependent individuals differentiate self less sharply from non-self compared to field-independent ones.

Breadth of categorising is another cognitive characteristic that has been considered in eyewitness identification accuracy (Kogan and Wallach, 1967)⁶ and 'refers to a preference for being inclusive, when establishing an acceptable range for specified categories' (Hosch, 1994:338). Thus, if a witness is over-inclusive, then he/she would be more likely to pick a foil in a line-up. Hosch (p. 339) cites empirical evidence that breadth of categorising is positively related to facial recognition accuracy⁷ and is predictive of eyewitness accuracy.⁸

Levelling-sharpening: Hosch (1994:343–4) has also suggested that a witness' position on this dimension could be related to suggestibility to unconscious

interference (see Ross et al., 1994a) and the misinformation effect (see Lindsay, 1994b; Weingardt et al., 1994, and below in this chapter). ‘Levelling-sharpening’ refers to reliable individual variations in assimilation in memory (Gardner et al., 1959).⁹ Levellers have been described as tending to blur similar memories and to merge perceived objects or events with similar but not identical events recalled from previous experience (Hosch, 1994:343).

Mood: it has long been known in cognitive psychology that people find it easier to recognise something than to recall and describe it. In accounting for the difference between recall and recognition, context is of paramount importance.¹⁰ Cues to recognition may be present within the witness when reliving the original incident and feeling the same way they did at the time¹¹ and/or in the external environment,¹² termed the first context ‘intra-organic condition’ of the learner and the second ‘stimulus properties of the external environment’.

Researchers have examined the hypothesis that a person’s mood at encoding will subsequently serve as a retrieval cue for the learned information during recall. This is known as state-dependent effect (Mayer and Bower, 1986). On the basis of their discussion of relevant empirical studies, Ellis and Ashbrook (1991:14) concluded that state-dependent effects seem to occur seldom and the results are often impossible to replicate. The same authors reported stronger support for the ‘mood-congruency effect’; that is, the view that individuals retrieve more easily material which is congruent with the mood state prevailing at the time of encoding. According to Ellis and Ashbrook, this phenomenon is quite robust across a broad range of experimental conditions. Support for both state-dependent and mood-congruency effects has been reported by clinical studies (see Weingartner et al., 1977; Ingram and Reed, 1986; Blaney, 1986).¹³ However, studies of the effects of emotional states on the retrieval of personal experiences in one’s childhood or more recently have reported contradictory findings (see Ellis and Ashbrook, 1991:16). According to Gudjonsson (1992a), the basic idea is that people find it easier to remember an event if they are in a similar mood (Haaga, 1989) or under the influence of a particular drug (Overton, 1964) or alcohol (Lisman, 1974) as when they witnessed the event. As far as the facilitating effect of cues in the external environment is concerned, the important finding is that reinstating the witness in the original context (for example, returning the witness to the scene of the crime, showing the witness photographs of the scene of the crime or asking the witness to form an image of the crime scene) enhances recall by maximising retrieval cues (Gudjonsson, 1992a:90; see also ‘cognitive interview’ below). Cutler and Penrod (1988) found, for example, that identification accuracy can be increased if police reinstate strong physical context cues associated with the offender, such as the offender’s voice, posture and gait. The effect of context on memory can be explained by Bower’s (1981) ‘associative network theory’ which holds that one’s emotions serve memory units and are linked to what has been seen and experienced. In other words, one maximises retrieval cues by reliving the original

context (Gudjonsson, 1992a:90). Reinstating the context is a crucial component of one particular technique for enhancing witness memory, namely, the ‘cognitive interview technique’ (see below).

Alcohol: alcohol abuse afflicts many societies (see De Luca, 1981; Saunders, 1984). Very few would doubt that, in addition to its astronomical social cost, alcohol is also a major contributor to road accidents and impairs many sensory motor and cognitive functions. Generally, the more alcohol consumed the greater the impairment, but this relationship is ‘subject to a host of task, instructional, cognitive process and individual variables’ (Read et al., 1992:427). Alcohol, of course, features frequently in the commission of a large volume of such criminal offences as homicide, rape, serious assault, robbery and culpable driving.¹⁴ It is often a requirement for judges in jury trials in common law countries to direct the jury that intoxication could render a witness’ recollections inaccurate.¹⁵

The overwhelming evidence shows that alcohol impacts adversely on eyewitness accuracy.

In view of the ethical problems in the types of experiments one can do and the fact that individuals differ in their alcohol tolerance, research into alcohol and witness accuracy face methodological difficulties. Steele and Josephs (1990), Cutler and Penrod (1995a) and Yuille and Tollestrup (1990) found that blood alcohol content impacts adversely on the acquisition and encoding of information, thus reducing witness accuracy. Read et al. (1992) reported that it significantly impairs subjects’ recall of peripheral information. More specifically, Dysart et al. (2002) found that the level of alcohol intoxication correlated with making a false identification from a target-absent show-up. Clifasefi et al. (2006) told half their subjects that they had received a placebo and half that they had received alcohol and the information was either true or false. They found that intoxicated subjects, regardless of what they were told, were more likely to show ‘inattentive blindness’ (that is, a failure to detect) an unexpected object in their visual field. Such findings cast doubt on an early study by Parker et al. (1980), who reported that consuming alcohol during the retention interval correlated with better recognition and recall performance than when subjects did not. It can be seen that the overwhelming research evidence documents that alcohol consumption reduces witness accuracy. However, more research is needed before the alcohol-memory performance relationship is elucidated, as far as the role of alcohol in particular perceptual processes is concerned. Lindsay’s (1994a:372) survey found that the level of witness intoxication during the crime was ranked tenth by potential jurors in importance as a determinant of eyewitness identification accuracy out of 25 variables.

Alcohol is one kind of drug. A commonly taken drug that is illegal in most countries is cannabis. It has been found that being high on cannabis interferes seriously with one’s recall accuracy of recent events (Thomson, 1995a:127). On the basis of what is known in psychological pharmacology, illicit drugs such as heroin, cocaine and amphetamines can only be expected to influence adversely both a witness’ initial perception of an event and his/her memory of it (Spiegel, 1989). Also, given the large number of people in society who are on prescribed

drugs such as antidepressants and barbiturates and so forth, there is a need for research into how such individuals' performance as eyewitnesses is affected by their medication.

Age: largely due to improvements in medical care, an increasing proportion of the general population, especially of western countries, comprises elderly people. Since the 1970s there has been an increasing concern about the abuse of elderly people in the home, in institutions and as vulnerable victims of crime (Groth, 1979), who often live in fear of crime even though they are the least likely to be victimised by strangers.¹⁶ In criminal law, the fact that a victim of an offence is of advanced age is regarded as an aggravating factor at the sentencing stage (Kapardis, 1985:103–5; Thomas, 1979). However, it should be noted in this context that ageism, like racism, which it resembles, is based on prejudice and fear. Senior citizens are often the victims of discrimination due to negative stereotypes and prejudice (Berger, 2001:616–7).

According to the American Psychological Association (APAONLINE), 'For the human brain, there is no such thing as over the hill'. The memory that declines the most is episodic (that is, what did I have for dinner last night?), source (that is, where did I read about that?) and flashbulb (for example, where were you on 11 September 2001?). Semantic and procedural memory declines the least as one gets older. While people's ability to recognise new information does not decline with age, their ability to remember new information declines during early and middle adulthood (Schonfield and Robertson, 1966). In their study of older people in England, Baber and Brough (1997) used a focus group of 20 people and a national postal survey of 250 people aged 55 or older. Their results indicate that, 'older people feel they are able to effectively recall events and descriptions, wish to be treated as individuals, and acknowledge their declining abilities' (p. 6). In fact, there is also ample evidence pointing to 'cognitive slowing' with ageing, that is, that as one gets older one gets slower as far as the rate of rehearsal during a memory task, scanning in memory search tasks or responding in primary and secondary memory tasks is concerned (Light, 1991:361). According to Light (1991): 'Older adults complain more about memory than younger adults' (p. 333). Light also reported that older adults on forensically relevant tasks remember less of buildings along the main roads in towns they have lived in for a long time, about what coins and telephones look like, activities they have participated in, names and faces of people and, finally, they have poorer memory for prose (p. 334). Farrimond et al. (2006) found that memory search but not cue detection was affected in older people when participants were given fewer trials to learn the instructions in a simulated shopping task. They concluded that their findings point to a reduction in capacity for self-initiated reinstatement of working memory in old age. May et al. (1993) reported that older adults perform better at recognition tasks early in the morning rather than late in the day. Apparently, also, older people are disadvantaged if their recall accuracy is tested by means of multiple-choice questions instead of 'yes' or 'no' answers (List, 1986; Yarmey and Kent, 1980).

There is disagreement among researchers as to whether there is a peak age beyond which memory does not improve and may decrease. Diamond and Carey (1977) claimed to have found that memory peaks at the age of 10 years while Carey (1981) and Chance et al. (1982) reported that adult-like levels of face recognition on performance may not, in fact, be achieved until about 16 years of age.¹⁷ There is agreement, however, that elderly people of 70 years or older have poorer perceptual and memorial faculties (Wallace, 1956). A common loss suffered is in short-term memory retention (Craik, 1977) and in visual acuity for both near and distant objects, as well as the ability to discriminate colours adequately. Elderly people have also been shown to have a strong tendency to emphasise the accuracy of what they say at the expense of the speed in saying it;¹⁸ are less able than younger subjects to pay attention to stimuli on the periphery when driving (Manstead and Lee, 1979), and have less confidence in their testimony and may well approach memory tasks differently (Yarmey and Kent, 1980).

The available literature also indicates that the elderly are also more prone to recognition errors for faces seen only once before.¹⁹ Searcy et al. (2000) compared 18–30 and 60–80-year-olds and found that the elderly subjects made more false identifications. However, this age-related deficit disappears if a face has been seen from a number of viewpoints (Bartlett and Leslie, 1986; Yarmey and Kent, 1980). Another defect which the elderly suffer is in free recall of events they have witnessed (List, 1986). Bartlett and Leslie (1986) reported that there may be an age-related deficit where the suspect is young and/or is seen only at a glance. More recent studies have in fact reported an *age-own bias*. Comparison of face-recognition by 18–25 and 35–55-year-olds by Wright and Stroud (2002) revealed an own-age bias in target-present but not in target-absent line-ups. However, a similar study by Memon et al. (2002b) found no support for own-age bias. More research is needed before definitive conclusions can be drawn about the apparent age-own bias. Finally, it should be noted that studies reporting no significant differences between elderly and young subjects²⁰ defined ‘elderly’ to mean an average age of 50 years while others reporting differences²¹ used ‘elderly’ to refer to subjects aged 65–90 years. According to British researchers Baber and Brough (1997), it is generally accepted that ‘older’ starts at 55 years of age. For American potential jurors, however, the age of the witness is not considered an important determinant of eyewitness identification accuracy. Lindsay (1994a:372) reported that it was ranked eighteenth in importance out of the 25 factors considered. Ross et al. (1990) carried out three experiments on mock-jurors’ perception of the average 74-year-old’s credibility as a witness compared to an average 24-year-old and reported inconsistent results. There was general agreement, however, that elderly witnesses are honest.

In her review of the literature on memory and ageing Light (1991) discussed four classes of explanation for age-related decrements in memory, namely, (a) metamemory (in terms of deficient knowledge about memory; deficient strategy use; memory monitoring); (b) semantic deficit (for example, in terms of richness, extensiveness and depth of encoding; encoding inferences); (c) impairment of

deliberate recollection; and (d) reduced processing resources. Light concluded that, whether separately or combined, these hypotheses do not account adequately for what is known about the memory performance of elderly people (p. 366). On the basis of his literature review, Bornstein (1995) suggested the following means of improving elderly eyewitnesses' memory: use recognition; ask precise questions; avoid leading questions; emphasise that a high degree of certainty is needed before deciding to select someone out of a line-up; present a line-up sequentially; and, finally, make use of the cognitive interview technique (see below).

Race: as criminologists are not tired of reminding us, 'blacks [in the United States] are vastly over-represented in prison populations, in the official statistics of arrest and in victim reports of robbery and assault' (Feldman, 1993:69). Aborigines in Australia are also over-represented in official criminal statistics,²² as are West Indians in Britain (Ouston, 1984). Researchers have generally found that cross-racial identifications are more difficult, less accurate and thus less reliable than within-race identifications by adult witnesses.²³ A meta-analysis by Bothwell et al., (1989) and a later one of 39 published studies by Meissner and Brigham (2001) found that the own-race bias is consistent for both white and black subjects, that testimony will be of doubtful validity when the race of the witness and the suspect is not the same. Cross-racial identification is also characterised by a higher rate of false identifications (Thomson, 1995a:136). Support for the own-race witness identification bias has also been reported by a comparative field study in England and South Africa (Wright et al., 2001). According to McLelland and Chapell (1998), the own-race bias can be explained in terms of familiarity, whereby people store faces of their own race more accurately and efficiently. In fact, research evidence supports an own-race effect at the level of perceptual encoding in adults. Walker and Hewstone (2006) examined the perceptual basis of the own-race effect in white and South Asian secondary school students from two socially segregated communities. A significant own-race effect was found for white subjects only, that is, they were better at discriminating white relative to South Asian faces. Walker and Hewstone concluded that other-race experience influences other-race perceptual expertise. Differences in frequency and quality of contact between members of different races go a long way towards explaining the cross-race identification difficulty. Support for this was provided by Dunning et al. (1998) who found that seasoned basketball fans were as accurate in identifying African-American faces as European ones but that novice basketball fans were not. Of course, as racial integration becomes more widespread, the extent of the own-race witness identification bias will be reduced, as the South African experience suggests (Wright et al., 2001). Interestingly, despite the overwhelming evidence for the own-race witness identification bias, race of the witness and the criminal was rated as one of the least important factors (twentieth out of 25) in eyewitness identification accuracy in the Lindsay (1994a:372) study. The issue of the cross-race effect is discussed further in the context of line-ups (see chapter 9).

People are generally better at identifying members of their own race but seasoned basketball fans are equally good at identifying faces from other races.

Gender: according to Wootton (1959): 'If men behaved like women, the courts would be idle and the prisons empty' (cited by Feldman 1993:66). The gender gap in criminal offending has been known in criminology for a long time and victimisation surveys confirm it (Feldman, 1993:66; Blackburn, 1993:50–2). A number of studies have focused on gender as an influencing variable in eyewitness identification/facial recognition (see Loftus et al., 1987c, for a review). Levine and Tapp (1971)²⁴ informally interviewed members of a large police force in the United States and found they seemed to prefer female to male witnesses. But how important is gender in witness testimony? It is established that, generally, people tend to overestimate the duration of an event but it appears that females exhibit the tendency more than males (Loftus et al., 1987c). Males, on the other hand, are significantly more likely to suffer colour deficiency (Hurvich, 1981) and hearing loss (Corso, 1981), deficiencies that inevitably have a detrimental effect on their accuracy as witnesses. In addition, a witness' gender has been found to influence the types of details that are remembered from an incident. Powers et al. (1979) reported that females are more accurate in their memory recall than males for 'female-oriented' details and vice versa, suggesting that a witness' interest (see below) may well be another important factor in testimony.

A series of other studies of the importance of gender has yielded inconsistent findings. While some²⁵ found no gender differences in identification/facial recognition accuracy, others reported that females have higher accuracy of recall and are better than males in identifying a bystander.²⁶ There is also some evidence²⁷ that accuracy is greater for same-gender than cross-gender targets.²⁸

As far as violent incidents and the effects of arousal are concerned, Clifford and Scott (1978) found that female subjects were less accurate than male subjects about event details but were equally accurate as male subjects after viewing a non-violent incident. MacLeod and Shepherd (1986) compared 379 witness reports for assaults that involved either physical injury or no physical injury to the victim. They found no differences in the kinds and amount of details reported by male and female witnesses when the victim was not physically injured. However, when the victim sustained physical injury, female witnesses reported significantly fewer details about the perpetrator's appearance than did male witnesses. Finally, Jalbert and Getting (1992) reported a tendency by male subjects to make more false identifications than females, irrespective of the race of the suspect. In considering contradictory findings on gender and person identification we should note that different studies have used different events: rape (Yarmey, 1986b; Yarmey and Jones, 1983), a robbery (Loftus et al., 1987a) or a non-criminal event or a snatch-theft of a satchel (Sanders and Warnick, 1981). Also, as Foster et al. (1994:110) point out, none of the studies just mentioned examined consequentiality or type of line-up instructions. We can see that while gender does appear to be an important factor in the reliability of eyewitness testimony, for the most part the often contradictory findings reported do not allow any definitive conclusions to be drawn, other than the weight of the evidence points to a same-gender bias. Interestingly, Lindsay (1994a:372) found (without taking type of crime into account) that the potential jurors in his study

considered the gender of the witness to be rated the least important variable in eyewitness identification accuracy of all the 25 examined.

Schemas/stereotypes: social psychologists are particularly interested in social perception/cognition. For a number of years now, it has been known that in some circumstances (for example, of ambiguity, as when one has a glimpse of a robbery being committed in a matter of seconds) people tend to report seeing what they expect to see, or desire or need to see (Whipple, 1918; Hollin, 1980). In Hollin's (1980) study the target person had blond hair, green eyes and a fair complexion. Of the 93 per cent who correctly recalled the hair colour (blond), almost half reported blue eyes! In other words, the subjects remembered the information originally encoded but combined it with stereotypical information, with information from their own scripts (Bower et al., 1979). As Buckhout (1974:26) put it: 'Expectancy is seen in its least attractive form in the case of biases or prejudices'. Very relevant to the impact of people's expectations on their testimony are their social schemas, that is, mental representations of social categories. Schemas can refer to persons, social events and social roles (see Lilli, 1989; Wippich, 1989). They include some knowledge about a particular object or person, some information about the relationships among the various thoughts concerning that object or person, as well as some specific examples (Taylor and Crocker, 1980). Our social schemas often influence the impressions we have of others. Once we have decided that a person fits a particular category, then our mental representations about that group of people may influence our expectations, how we subsequently remember and what inferences we make about that person, as well as how we judge them (Goodman and Gareis, 1993). Similarly, there is also evidence that when we observe an ambiguous social event we may well perceive causal relations that are not actually present because two acts happen at the same time (Dahmen-Zimmer and Kraus, 1992). In other words, when the picture we have of a social event is incomplete, as witnesses we show phenomenal causality. In addition, people have a tendency to associate crimes with particular faces (Bull and Green, 1980; Goldstein, Chance and Gilbert, 1984). What is being emphasised here is the finding that when people find it difficult to remember they may use schematic processing to enhance their memory. Kleider et al. (2007) had subjects watch a slide show of a man and a woman perform stereotype-consistent and stereotype-inconsistent actions. Over a two-day delay subjects increasingly misremembered stereotype-inconsistent actions as having been performed by the stereotype-consistent actor. When the wrong actor was suggested to the subjects, all the source errors increased irrespective of the stereotype consistency. Kleider et al. concluded that when memory fades, people rely more on schemata, thus making more stereotypic memory errors.

Unlike Sheldon (1942), most contemporary criminologists would not accept that there is a relationship between criminal behaviour and certain body types. As most people are aware, however, film-makers, fiction writers and television producers have traditionally portrayed criminals as dark and swarthy while the heroes have tended to be blond. Such stereotypes would seem to reflect popular stereotypes about the appearance of criminals.²⁹ Yarmey (1994) reported that stereotypes also

impact on earwitnesses (see chapter 10), that is, that listeners attribute personality characteristics to individuals on the basis of speech characteristics (p. 107), while MacLeod et al. (1994) emphasised the importance of stereotypes when it comes to qualities people associate with certain body types. We are not concerned here with whether such stereotypic notions are valid – in fact, the question of validity is irrelevant – but with their influence on how people perceive and subsequently remember and describe others (Liggett, 1974).

Journalist Walter Lippman (1922) coined the term ‘stereotype’ to refer to the generalised beliefs we have about particular groups in society and they can be positive, negative, implicit or explicit. Stereotypes are a type of schema and, therefore, they distort reality (as do all such concepts) and oversimplify it to a certain degree. Quattrone and Jones (1980) found that people have a tendency to see out-group members as relatively homogeneous in opinions and behaviour, while they perceive their own group as more heterogeneous. An early experiment by Allport and Postman (1947) as part of a ‘rumour-chain’ illustrates the importance of stereotypes. Allport had subjects hear about a drawing of seven people on a subway train that included a seated woman holding a baby in her arms, a black man in jacket and tie standing up and a white man with sleeves rolled up standing near him holding an open cut-throat razor in his left hand. The white man seemed to be saying something to the black man, waving his finger at him at the same time. When later asked to describe what they had seen half of the subjects reported that the open razor had been in the hand of the black man. However, the empirical evidence regarding the importance of ethnic stereotypes in the weapon-transfer phenomenon is equivocal. Testing both recall and recognition, Boon and Davies (1987) showed slides to subjects. For half the subjects the slides showed a white man holding a knife and talking to another man who was black, for the other half of the subjects the white man with the knife was talking to another white. The weapon-transfer phenomenon when the other man was black was observed when subjects went through a recognition test first before recall. Treadway and McCloskey (1989), however, failed to replicate the weapon-transfer phenomenon. It is not clear whether Treadway and McCloskey’s negative finding is evidence against the importance of ethnic stereotyping or an artifact of their methodology. In view of the limitations of slide presentation as a research method discussed in chapter 2, there is undoubtedly a need to investigate racial stereotypes in eyewitness recall/recognition accuracy utilising a combination of different research methods.

Adding to a large body of literature, Bollingmo et al. (2007) in Norway studied 69 police investigators whom they asked to view one of three video-recorded versions of a rape victim’s statement. A professional actress was used to make the statement displaying emotional expressions that were ‘congruent’, ‘neutral’ and ‘incongruent’. Police investigators judged the victim as most credible when crying and showing despair and less credible when being neutral or expressing more positive emotions. Bollingmo et al.’s study shows that police officers in Norway, as in other countries, have stereotypic beliefs about rape victims that lead them to believe

or not to believe their statements, a decision that will influence how a rape victim's report to the police is processed further by police investigators.

Social psychologists have long established that if people know some key features of a person (for example, that they are 'warm-hearted' and 'honest' or 'ruthless and brutal') they tend to infer other physical and personality characteristics consistent with the limited original description (Hurwitz et al., 1975). Loftus (1979) identified four different types of expectations that can influence how we perceive and act: cultural expectations or stereotypes, expectations from past experience, personal prejudices and temporary expectations. Such expectations will, of course, impact more on people's perception and memory when they have but a glimpse of a brief and complex incident or a face, and/or when the memory has become rather vague and there is perceived pressure to recall a complete image.

Physical attractiveness: a good example of a popular stereotype is the general belief that 'what is beautiful is good' (Ashmore et al., 1966). Regarding what is 'attractive', without ignoring variations in standards of beauty across cultures, the available social psychological literature points to having big eyes and prominent cheek bones as correlates of an attractive face. We also know that physically attractive people are considered more socially competent, sexual, happy, assertive, extraverted and popular than less attractive ones (Eagly et al., 1991; Feingold, 1992). The available psychological literature also shows that both men and women are strongly influenced in their first impressions of people by physical attractiveness,³⁰ that it does pay to be tall³¹ and to be good-looking when being judged by a person who does not know much about you (Felson, 1981). Researchers have reported that the more attractive someone's face, the less severe the sentence given by mock-jurors.³² But what is the impact of a person's physical attractiveness on witnesses' testimony? Attractive faces are better recognised than unattractive ones;³³ male witnesses better remember details of a female's clothing if they have seen her wearing make-up than without;³⁴ and, finally, subjects are more likely to remember later on details of a conversation they had with someone over the phone if that person has been described to them as attractive rather than unattractive. The apparent significance of physical appearance is not reflected in potential jurors' beliefs about what is an important determinant in eyewitness identification accuracy. Lindsay (1994a:372) reported that the accused's appearance was ranked as one of the least important variables – 22nd out of 25 variables by potential jurors.

Whether the Witness is Also a Victim of the Crime: one of the very few roles in which crime victims are seen in a public place is as a witness to a crime in criminal trials (Rock, 1991). In his study of the treatment of victims and use of space in the Wood Green Crown Court in North London, Rock (1991) describes crime victim witnesses as 'an admixture of pariah and saint' (p. 278). Rock also found that a victim-witness' cross-examination often comes after lengthy and lonely periods of waiting around the courtroom precinct. Unlike the psychological laboratory, in

Our stereotypes of other people influence how we perceive and behave towards them as well as how we remember and describe them.

real life a frequent key witness to a crime is the victim him/herself. If this person happens to be a victim of a violent crime such as a robbery or rape or assault (see North et al., 1989, regarding short-term psychopathology of mass murder eyewitnesses), it is possible they will experience difficulty in accessing details of the incident because of their psychological state when being asked to describe or identify the suspect soon after the crime. On the other hand, however, it is also possible that a victim of crime is more motivated to focus on the criminal's face and to remember it well. While it has been found that recall for such witnesses becomes better with time (Bradley and Baddley, 1990), as far as the accuracy of victim-witnesses vs witnesses-only is concerned, studies have reported conflicting findings. MacLeod's (1987) and Fahsing et al.'s (2004) studies of real-life witnesses found that bystanders gave less information about both events and appearance than did victims. Two possible explanations for the findings in both studies are that: (a) victims of crime themselves get asked a lot more questions by police than is the case with bystanders, on the assumption that victims are in a better position to 'assist police with their enquiries'; and (b) victims of armed robbery or assault, for example, get a closer look at the offender. However, it has been found that in the context of theft, the respective levels of accuracy of victims and bystanders are not different (Hosch and Cooper, 1982; Hosch et al., 1984). Similar findings were reported by Farrington and Lambert (1993) in their study of burglary and violent offenders in Nottingham, England. Table 3.1 shows the highest degree of agreement between offender characteristics, as recorded by police when offenders were apprehended, and victim and witness descriptions.

Farrington and Lambert (1993) concluded that: 'it seems clear that reports by victims and witnesses about sex, ethnicity, age, height, build, hair colour, hair length and facial hair of offenders (at least) might usefully be included in an offender profiling system'. As Farrington and Lambert point out, when comparing the accuracy of victim and victim-witness descriptions of criminal suspects' characteristics it should be remembered that such comparisons are not possible for some types of crimes. For example, most burglaries take place when the victim is not at home and some crimes are committed under circumstances in which the only witness is the victim. Fahsing et al. (2004) concluded that offender descriptions are not really useful for identifying the actual perpetrator of an armed robbery but help police to narrow the range of potential suspects. Finally, whether the witness is a victim or a bystander is considered an important determinant (ranked seventh out of 25) of eyewitness identification accuracy by potential jurors (Lindsay 1994a:372).

Confidence: as McEwan (2003) reminds us, 'The adversarial system is built upon a conviction that the appearance and behaviour of witnesses are crucial indicators of reliability. The result is an emphasis on oral testimony . . . The rule against hearsay is the legal expression of this principle' (p. 105). However, as we shall see in chapter 8, relying on a witness' verbal and non-verbal supposed cues to deception, a court may easily be led astray by the demeanour of a witness in a

Relying on a witness' verbal and non-verbal supposed cues to deception, a court may easily be led astray by the demeanour of a witness in a trial.

Table 3.1 Offender characteristics recalled by victims and witnesses

	Victims' description (%)	Witnesses' description (%)
<i>Burglary</i>		
Sex	98.0	99.0
Ethnicity	85.3	82.6
Age	31.3	22.8
Height	–	18.3
Build	–	33.3
Hair colour	–	34.9
Hair length	–	83.1
<i>Violence</i>		
Sex	90.2	88.3
Ethnicity	82.5	82.0
Age	14.3	14.8
Height	18.3	20.9
Build	22.1	23.0
Hair colour	29.4	30.5
Hair length	57.0	59.3
Facial hair	31.9	32.2
Accent	45.5	–
Facial feature	94.0	94.3

trial. In fact, arguments for a reduced role for the hearsay rule are based on the well-founded belief that a witness' demeanour in court when being cross-examined is not a good basis for deciding his or her credibility. According to McGuire (1985),³⁵ there are two components to credibility: trustworthiness and expertise. In addition to consistency in a witness' account (Stone, 1991), a witness' appearance and demeanour (for example, confidence) may influence the assessment of his/her credibility, the defendant's guilt and the severity of the sentence imposed (Efran, 1974; Kapardis, 1985). When it comes to ascribing credibility to an eyewitness, his/her confidence 'is the most powerful single determinant' (Wells, 1985:58).

Regarding the relationship between witness confidence and accuracy, one would expect that a normal person who is more confident in the accuracy of what they are describing would, on average, be more accurate. As Williams et al. (1992:152) put it, people believe those who seem credible. In fact, available evidence suggests that mock/potential jurors rely heavily on eyewitness confidence to infer witness accuracy (see Cutler et al., 1988; Wells, 1984) and many a jury has been persuaded by a confident eyewitness testifying before it (Leippe, 1994:385). Furthermore, the US Supreme Court, rather amazingly, in *Neil v. Biggers* (1972) and *Manson v. Brethwaite* (432 US 98 (1976))³⁶ stated that eyewitness confidence is a significant indicator of witness accuracy. The claim by the US Supreme Court is of interest

in view of conflicting findings reported regarding the relationship between witness' confidence and accuracy.¹⁵ Eyewitness confidence accounted for less than 10 per cent of the variance in eyewitness identification accuracy in Wells and Murray's (1984) study. This is not surprising, perhaps, when we remember that it is decisions by police officers, magistrates, jurors, judges and other fact-finders about eyewitness testimony rather than testimony itself that can lead to wrongful convictions. Thus, a fact-finder ends up believing an inaccurate witness or doubts an accurate one (Leippe, 1994:385).

Contrary to popular belief, there is no significant relationship between witness confidence and identification accuracy. As a social phenomenon, this can be explained by cognitive dissonance theory.

A number of reviews have concluded (but see Sporer et al., 1995, below) that, contrary to what some fact-finders would expect, there is no significant relationship between witness confidence and identification accuracy.³⁷ Different explanations have been offered for this finding. Leippe (1980) suggested that the accuracy and confidence of witnesses could be controlled by different mechanisms; Bothwell et al. (1987b) expressed the view that the better the encoding conditions the better the relationship between confidence and accuracy, while Wells and Murray (1984) attributed differences in the findings reported to differences in the methodologies used by the different researchers. Leippe (1994) suggested that fact-finders' perceptions of witness credibility can be understood by utilising a witness communication-persuasion model. For Leippe, 'the witness, in essence, is an influence agent delivering what we might call a "memory message"' (p. 386) in an interactive context (p. 387). Thus, according to Leippe, how a fact-finder judges a memory message is influenced by: (a) the content and delivery of what the witness says; and (b) the fact-finder's own beliefs and preconceptions about eyewitnesses. Furthermore, the content and delivery style of the witness are, themselves, influenced by witnessing conditions, questioning factors and such attributes of the witness as his/her age. In his book *The Psychology of Criminal Justice*, Stephenson (1992:161) made a very good suggestion, namely, that testimony be scrutinised for plausibility, consistency and likely reliability.

Williams et al. (1992) draw on Festinger's (1957) concept of 'cognitive dissonance' (that is, the social psychological explanation for a person wanting to maintain consistency with a view they have expressed publicly) to explain the role played by a witness' confidence in testimony. Williams et al. state that a witness' confidence in the accuracy of their recall increases as they repeat and repeat the same account to others; in other words: 'Confidence in memory is a social phenomenon, as well as a social issue, and as such, is subject to social influence' (p. 152). Pressure to be consistent would also be a strong factor operating in this context, resulting, perhaps, in what Smith et al. (1989) refer to as the 'I was there so I should know' situation. Alas for magistrates, judges and juries, Brown et al. (1977) found that, with time, people who are confident of accurate memories are also confident of inaccurate memories. Furthermore, like mock-jurors (Brigham and Bothwell, 1983), police officers, too, and lawyers (especially prosecution ones) have been found to share the belief that confidence and accuracy go hand in

hand (Brigham and Wolfskiel, 1983). It would also appear that a witness who is confident in their testimony will insist on the accuracy of even specific details in his/her testimony – a factor that helps to convince jurors further (Bell and Loftus, 1988). In this context, Freedman et al. (1996) reported that a more detailed statement by a witness has a significantly greater impact on judgements of guilt when the honesty of the witness is not an issue; if a witness' honesty is an issue the finding obtained only applies if the amount of detail in the statement is at an intermediate level.

A meta-analytic review by Sporer et al. (1995) of 30 studies using staged-event methods that included target-present and target-absent line-ups has cast serious doubt on the findings of earlier reviews that the confidence-accuracy relationship in eyewitness research is a weak one. Sporer et al. included choice as a moderator variable and found that: (a) in every study reviewed, the mean confidence level was higher for correct choosers (that is, witnesses making positive identifications) than for incorrect ones; and (b) that the confidence-accuracy relationship was reliably and consistently higher for choosers but was not so for non-choosers. Of course, generally speaking, it is witnesses who choose a suspect in a line-up who will appear in court to testify. On the basis of their literature review, Sporer et al. suggest that 'it might be advisable to videotape the witness' statement and introduce the videotape into evidence' (p. 324) in order to preserve it for juries and also allow the confidence expressed by a witness at the time of the identification decision to be scrutinised in cross-examination. Regarding the role of the expert witness in this context, the same authors suggest that 'the expert might emphasise that witness confidence should, in any event, be considered together with a number of other variables that can influence eyewitness performance' (p. 324).

Attempts to identify the conditions that impede or enhance the confidence-accuracy relationship have highlighted the importance of exposure time (Bothwell et al., 1987b) and the distinctiveness and unattractiveness of the target's face (Brigham, 1990) at the encoding stage 'as well as the witness' willingness to choose someone from the line-up they viewed'. Also, Kassin (1985) found that allowing witnesses to gain 'retrospective self-awareness' (that is, to view videotapes of themselves identifying a suspect from a photospread before being asked to rate their confidence in their identifications) could improve the confidence-accuracy relationship. Shaw et al. (2001) had 96 subjects watch a videotape of a simulated robbery in groups of three or four. In the 'public' condition, subjects shared aloud their answers to the researcher's questions and their confidence ratings with the other participants while subjects in the 'private' condition did not share them. Shaw et al. reported that confidence ratings were significantly lower in the public than in the private condition. Luus and Wells (1994a, 1994b) have shown that not only is eyewitness confidence malleable but it is also bidirectional. In their study witnesses observed a staged theft, made a photo line-up identification and received different types of information regarding the alleged identification decision of their co-witnesses. It was found that witness confidence was inflated or deflated depending on whether

they were informed their co-witness had identified the same person as themselves. Interestingly, research in Sweden by Allwood et al. (2005) found that the meta-memory realism of witness confidence judgement two weeks later was not related to whether the participants had been interviewed with the Cognitive Interview or the Structured Interview. Regarding the confidence of child witnesses, Allwood et al. (2005) used video clips with 8–9-year-olds, 12–13-year-olds and adults, and found that realism in the subjects' confidence judgements was poorer when asked focused instead of free recall questions. Luus and Wells (1994a:355) have suggested that knowledge about the witness variable moderators relevant to the confidence-accuracy relationship could be conveyed in expert testimony and communicated to jurors, while findings pertinent to system variable moderators could be used to improve police procedures.

Lindsay (1994a:373) found that witness confidence was rated as less important by respondents than illumination, exposure time, alcohol and stress, but was more important than the age, race and gender of the witness and the suspect.

Konečni and Ebbesen (1992) strongly criticised experimental simulation studies of the relationship between witness confidence and testimony accuracy, also arguing that published claims by such researchers and 'the experts' litanies in court have potentially tilted the scale of justice toward unjustified acquittals by lowering the jurors' quite justified reliance on witness confidence' (p. 419). Citing research evidence, British authors Memon et al. (2003) reiterate the point that by relying on experiments and with college students as subjects (that is, homogeneous samples) many researchers in fact minimise 'variability in witness conditions, thereby reducing the chance of finding a confidence-accuracy relationship' (p. 113). Konečni and Ebbesen's and Memon et al.'s conclusions should be taken very seriously by psycholegal researchers who should reflect on what they research, how they research it and what they do with their findings. Confidence is a complex construct that warrants a more sophisticated analysis than has been the case in a lot of the eyewitness research. Research with forensically relevant real-life eyewitnesses is essential to test hypotheses generated in laboratory experiments with student subjects. Witness testimony confidence, of course, is but one factor that will contribute to the magistrate or jury or judge coming to regard a witness as credible. Other factors are internal consistency of the testimony, its improbability, whether it is consistent with other facts already established and with circumstantial evidence.³⁸

One of the aims of cross-examination for most lawyers is to discredit a key witness of the other party. One strategy that is routinely used is to try to show during cross-examination that a witness is inconsistent in what he/she remembers and the fact-finder should infer that the testimony is unreliable. Practising attorneys are probably not surprised to be told that experimental evidence confirms the effectiveness of this cross-examination strategy (Berman and Cutler, 1996; Berman et al., 1995). In some jurisdictions, in fact, a judge is required to make directions to the jury concerning a witness' prior inconsistent statements (*Davies v. R* (1995) Supreme Court, South Australia, *Crt Crim App*, 8 September). Interestingly enough, however, Loftus (1974) reported that mock-jurors were still influenced by the

testimony of a 'discredited witness', even when they were informed that the witness normally wore glasses and was not wearing them at the time of the incident. Later studies found that the impact of a discredited witness' testimony can be removed if, for example, the witness admits to poor eyesight and apologises for the testimony (Elliott et al., 1988; Havatny and Strack, 1980) and, finally, if the status of the discreditor is a relevant factor (Weinberg and Baron, 1982).

If a lawyer manages to reduce the accuracy and confidence of a witness, then he/she has succeeded in largely discrediting that witness. Kebbell and Johnson (2000) had subjects view a videotaped film. One week later half the subjects were asked about what had been seen, with half of them being asked confusing questions (that included negatives, double negatives, leading, multiple questions, complex syntax and complex vocabulary), while the other half were asked for the same information in simpler, clear language. It was found that confusing questions reduced significantly eyewitness accuracy and confidence. Furthermore, the subjects rarely asked for a confusing question to be explained or qualified their answers. Wheatcroft et al. (2004) examined the effect on witness confidence of three types of questioning: simple style, lawyerese questioning (including leading and suppositional phrases) and lawyerese with negative feedback. It was found the lawyerese style impacted adversely on the confidence-accuracy and that adding subtle negative feedback reduced the problem but also reduced overall witness accuracy. Finally, mock jurors observing the interviews judged the witness to be less accurate in the lawyerese negative feedback condition. Lawyers who want to boost a witness' confidence could do so by having them go over their statements, prepare them for questions the other side is likely to ask, providing them with feedback that they are performing well (Memon et al., 2003:112) and, finally, by encouraging a witness to exert extra effort during memory retrieval (Shaw and Zerr, 2003). However, whether eyewitness confidence inflation (that is, increases in a witness' confidence between the time of the identification and the trial) impacts on judgements on the strength of the defence case in trial may apply for white but not for Hispanic subjects (Bradfield and McQuiston, 2004).

Whether the eyewitness is a police officer: one of the skills that basic training at police academies and specialist training at detective training schools all over the world aims to develop is a sharp ability to observe and a good memory for details. Furthermore, many people will go along with the belief that because of their training and experience police are more accurate witnesses than civilians (Yarmey, 1986a). According to the Court of Appeal in England (see *Ramsden and Williams (John)*,³⁹ witness identification by a police officer carries more weight than an ordinary witness. However, as far as memory capacity is concerned, police have been found to be similar to civilians in the amount of information they retain from their daily briefings, irrespective of whether the information is presented face-to-face or not, and better recall of information is associated with greater length of service in the police (Bull and Reid, 1975). Different findings were reported by Ainsworth (1981). In Ainsworth's study the subjects comprised: (a) police officers with an average of nine years' experience; (b) new police officers (averaging less

than a year); and (c) a control group of members of the public. Subjects were shown a film in which a staged event took place, including, for example, a car theft, a man loitering suspiciously outside a bank, and traffic offences. No significant differences were found between the three groups of subjects regarding the number of offences detected and, with the exception of the traffic offences, the inexperienced officers exhibited the highest reporting and the experienced ones the lowest. Given the small and very likely unrepresentative groups of subjects in Ainsworth's study, his findings should be treated with caution. His findings, nevertheless, like those of Verinis and Walker (1970) and Tickner and Poulton (1975), do not support the popular belief that police officers, because of their special training, are more vigilant in perceiving offences and suspicious circumstances (p. 235). The finding that young police officers focused on traffic offences at the expense of other offences could possibly be due to the fact that a lot of attention is paid to traffic offences early in police training in Britain and elsewhere and/or a wish on the part of the young constables to maximise their performance by focusing on an offence they perceive as easier to detect (p. 236). Finally, another interpretation of Ainsworth's (1981) findings could be in terms of police officers having been taught to exercise caution before recording a piece of behaviour as an offence. The need for further research in this area cannot be overemphasised.

It turns out that precisely because of their very training and experience police also develop a mental 'set' and are thus more predisposed to selectively perceive and interpret information about an event in such a way as to even impute and remember details of a criminal nature that, in fact, never existed. Marshall and Hinsien (1974)⁴⁰ showed police and civilian subjects a 42-second film in which a man approached a pram, pulled down its protective net, and then walked off. As he was walking away, a woman appeared out of a house. It was found that while police remembered more details about the persons depicted, they also remembered twice as many incorrect facts (that is, non-existent details) than did the civilian subjects.

In an interesting study by Clifford and Richards (1977) police and civilians were asked to describe the appearance of a target who had walked up to them to ask the time (short duration, 15 seconds) or to ask for directions (long duration, 30 seconds). Using data from stationary police and civilians and from the subjects who really looked at the target, it was found that at short exposure there was no difference in the amount of target detail recalled by the two groups but the police recalled more such detail in the long exposure condition. On the basis of those findings Clifford and Bull (1978:191) stated that 'providing an irreducible minimum time for viewing was not prevented, police had processing skills which could be employed and which eventuated in better recall'.

A Canadian study by Thomassin and Michael (1990) had subjects view a staged non-violent event in a classroom. It was found that while police science students provided more physical and clothing descriptions than medical biology students they were not more accurate. Also, the former group made more mistakes in the

visual identification and were more certain of their selections than the civilians. These results support Ainsworth's (1981) conclusion that: 'The claim that police officers are specially trained in the perception of offences and suspicious circumstances was not supported by the data . . .' (p. 235).

As far as race recognition is concerned, the study by Billig and Milner (1976) concluded that police officers are no exception to the finding that such recognition is poor, irrespective of whether they have worked in black neighbourhoods. Finally, researchers (see Verinis and Walker, 1970; Tickner and Poulton, 1975) have found that because of their training and experience police officers view events in predictably different ways from civilians. More specifically, they are prone to construe an event as criminal, as involving the commission of an offence, and thus to remember events and details that never existed.

Logie et al. (1992) compared the recognition accuracy of: (a) 10 residential burglars in a remand centre with an average age of 16.1 years; (b) 14 male police detectives (12 constables, one sergeant and one inspector); and (c) 10 highly educated law-abiding members of the public with a mean age of 39 years. They used photographs of houses, and subjects were given a surprise recognition test where, in some photographs, physical features had been changed. It was found that recognition memory was better for the group of burglars than for the police officers who, in turn, were better than the law-abiding members of the public. In a second experiment, Logie et al. compared 19 male juvenile burglars with a mean age of 15 years 2 months with a control group of 10 boys whose mean age was 14 years and who had been charged with a non-burglary offence. Both groups of boys were in a British residential and day school for children with special educational needs. It was found that the juvenile burglars' recognition memory performance was significantly better than that of the other offenders. The Logie et al. findings point to burglary offenders possessing a level of expertise that is associated with their experience of offending. In view of the fact that police officers, like civilians, have poor knowledge of many important factors in eyewitness testimony (see Bennett and Gibling, 1989), the need for improvement in police training to address this important aspect of the work cannot be stressed too strongly.

Stephenson et al. (1989) compared the recall performance of uniform police members, mainly constables, with at least three years' experience with that of students. Stephenson et al. had subjects listen to a tape-recording of a script featuring a fictional interrogation by two police officers, one male and one female, of a woman who alleged she had been raped. Under free recall, individual police officers performed consistently worse than students. Police recall was much better than that of students when they were working in dyads or four-member groups (see also below), but they also produced more errors than did the students.

Empirical evidence that experienced police officers, because of their professional knowledge and experience of violent crime, are more accurate eyewitnesses than the general public was reported by Christianson et al. (1998) in a Danish study. Experienced police officers with a mean age of 35 years, police recruits,

psychology undergraduates and high school teachers were shown a slide presentation of a simulated violent crime, were given neutral facial photographs of men and women to study (filler task) and, 20 minutes after seeing the slides of the crime, they were tested for their recall of the incident. Finally they were asked to identify the perpetrator in a line-up with seven foils. The line-up was presented simultaneously. It was found that the experienced police officers were superior in overall performance to the other three groups, including remembering more peripheral information such as colour, model of car used in the robbery and licence plate number.

On the basis of the studies mentioned, the weight of the evidence indicates that police are: no more vigilant unless an event of long duration is involved; their recall is no more accurate than that of civilians and, in fact, they may make more errors of commission and feel very confident in their testimony nevertheless; their cross-race recognition accuracy is as poor as that of civilians, even when police officers have worked in black neighbourhoods; generally, there are conflicting findings as to whether their ability improves with length of service and, finally, they are prone to put a criminal construction on events they witness and even to report events and details that never existed. Contrary to how the police are usually portrayed, their testimony is no more reliable than that of members of the public. Consequently, their credibility is unwarranted and they should not be regarded as 'experts' when testifying as witnesses in court. This conclusion, however, needs to be treated with caution due to the low ecological validity of many of the studies mentioned because some used photographs⁴¹ and non-violent incidents. On the basis of the findings reported by Stephenson et al. (1989) who, in contrast to other researchers, tested witness accuracy for violent incidents, it does appear that experienced police officers remembering with another or with three more colleagues, are capable of more accurate recall than non-police. In the real, everyday world of operational policing, an experienced undercover police officer may be asked by his superiors to recall the content of conversations and/or facial and other characteristics of suspected drug-dealers, bomb-makers or even professional assassins they encountered briefly in a dark alley or car park or, finally, to identify such suspects in a line-up. This is a far cry from the well-controlled world of the psychology laboratory. Future research should attempt to replicate Christianson et al.'s (1998) findings under realistic conditions. Meanwhile, police officers are left to ponder the policy implications of the finding that available evidence shows that, with the exception perhaps, of recognition of faces of a different race, it is impossible to train adults to improve their face recognition accuracy (Williams et al., 1992:147). This somewhat pessimistic picture for police eyewitnesses may, however, change in view of the increasing involvement of psychologists in police training programs and further field studies.

Number of witnesses: despite the fact that people witness a crime in a social context, and often enough there is more than one witness who is likely to talk about it with other witnesses and/or talk to others about it as well as answer questions by police personnel, very few studies have concerned themselves with collaborative

testimony. According to Stephenson et al. (1989), in the UK: 'There're no legal rules forbidding collaboration by police officers or anyone else... The only rule is that if you do collaborate, you should say so... Collaborative testimony itself is admissible, and indeed, one officer may give evidence on behalf of a group of officers...' (p. 324). Furthermore, 'There are important legal issues raised by this practice' (p. 255). Stephenson et al. (1982) asked dyads of subjects in Austria who listened to a story to recall details by themselves or in dyads. The dyads were encouraged to discuss the story and to agree on a single version. It was found that dyads produced more correct answers than individuals, both immediately and one week later. As far as errors are concerned, dyads had a strong tendency to produce more implicational errors (that is, to go beyond the original but not to contradict it) than did individuals (p. 257). Using a tape-recording of a script of a police interrogation, Clark et al. (1986) replicated the finding that dyads gave more correct answers than did individuals. Four-member groups were found to have twice as many correct answers as did individuals. In other words, a relationship was found between group size and number of correct answers. However, Clark et al. also found that groups of four subjects 'were virtually certain of the correctness of their wrong answers' (p. 258).

Stephenson et al. (1989) examined differences between police officers and students as a function of group size (individual, two-person, four-person) and reported the following: in responding to a questionnaire, individual police, police in dyads and four-person groups answered more questions correctly than did students; police in dyads and four-person groups did better than students under free recall and, finally, police dyads were almost twice as productive as individual police (p. 261). Stephenson et al. interpreted their findings as indicating that police respond more to the stimulus of the group (p. 262). It is interesting also to note in this context that Stephenson et al. (1989) found confidence increased with group size (for the wrong reasons), while in an earlier study (Stephenson et al., 1986a) it was reported that when there is disagreement between individuals, the more confident member of a dyad normally prevails. Stephenson et al. (1989:265) suggested, therefore, that there may be some merit in individuals attempting to recall tasks prior to discussion and decision.

In the light of their findings, Stephenson et al. (1989:268) concluded the following about the practice of admitting collaborative evidence: (a) potentially useful information is excluded by groups; (b) group remembering is selective remembering; and (c) the practice of permitting one police officer to represent a group is a dubious one. In the same vein, Stephenson et al. (1991) also warned that a group of individuals who have a vested interest in what they remember (for example, two police officers remembering details of an assault in which they were the victims) may be motivated to fill any gaps in their recall by inferring some of the details and, also, to testify falsely about the incident, appearing very confident in court. These concerns take on greater significance when we remember that there is no precedent for the cross-examination of a group (p. 269). Other studies, however, have yielded results that are different to those reported by Stephenson and his co-workers.

On the basis of their evaluation of the existing literature dealing with the question of whether ‘two heads are better than one’ (that is, the social facilitation of memory hypothesis; see Edwards and Middleton, 1986), Meudell et al. (1992) maintain that those studies that have taken information-pooling into account⁴² have found that group recall is either at or below the level that such pooling would predict; in other words, that groups do not outperform the pooled contributions of their constituent members (p. 526). Meudell et al. could find no evidence whatsoever that dyads of subjects generate new information that was not available to either member of the pair, that is, they could find no support for the social facilitation of the memory hypothesis.

Underwood and Milton (1993) showed student subjects a video of a two-car collision at an intersection. They used a questionnaire to test subjects’ recall individually or in groups of three after one hour. Groups of subjects were encouraged to talk to each other during the showing of the film and in the period immediately after the accident before being questioned. They found no overall differences between the recall accuracy of individual and group witnesses. However, when expecting to see a collision, the group witnesses were more accurate than the individuals. Thus, Underwood and Milton’s study provides partial support for the social facilitation of memory. However, unlike Meudell et al. (1992), Underwood and Milton did not compare the recall of individuals and groups taking information-pooling into account – an omission that detracts from their findings. In view of differences in the subjects, materials and measures used in Stephenson et al. (1989), in Underwood and Milton (1993) and Meudell et al. (1992) studies, the jury is still out on whether two heads are better than one in eyewitness testimony. Collaborative testimony does, of course, warrant more attention than it has enjoyed by psycholegal researchers.

While being interviewed by police a witness may (foolishly) be told what another witness has already told them. Also, a police officer may, contrary to the advice given to police recruits at police academies all over the world, interview the two witnesses together. Shaw et al. (1997) examined the influence of inaccurate information provided by a co-witness and found that it had an adverse effect on witness accuracy, especially if combined with a leading question. To prevent co-witness information biasing eyewitness accuracy police officers should interview eyewitnesses to a crime separately.

2 PERPETRATOR VARIABLES

Criminal investigators generally take very seriously what a crime witness tells them about both the crime and the perpetrator (Kebbell and Milne, 1998) because, even though such information very rarely helps police to identify the perpetrator, it helps them to narrow the range of potential suspects. In evaluating the findings of studies that utilise real-life archival data (usually from police files) some limitations of such data should be borne in mind (Fahsing et al., 2004): the findings obtained may be due to factors not included in archival data; what offence and offender

descriptions are available in files reflect the questions police are trained to ask witnesses (Milne and Bull, 1999) and there are individual differences in what police officers ask witnesses. Crimes, of course, are committed alone or in company. It has been found that offender description accuracy declines as a function of the *number of perpetrators* (Clifford and Hollin, 1981; Fahsing et al., 2004). As operational police know only too well, an eyewitness may fail to identify an offender in an identification parade even though he has been very accurate about individual characteristics of the offender. The large Dutch study by Van Koppen and Lochun (1997) of real-life witness descriptions of robbery offenders found the following degree of agreement between the witness description and the police description: gender (100 per cent), eye shape (100 per cent), hair colour (73 per cent), face shape (69 per cent) and race (60 per cent). The Fahsing et al. (2004) study of armed robbery witness accuracy reported that, while the total number of offender attributes mentioned by a single witness ranged from 2–16, the number of basic features contained in a description ranged from 1–5. Fahsing et al. concluded that such eyewitness descriptions are useful in assisting the police to narrow the range of potential suspects for a robbery rather than to identify the actual perpetrator. Their conclusion is not surprising because the offenders in their archival study operated in disguise by covering distinguishing facial features. Interestingly, though, of the CCTV verifiable offender attributes, 65 per cent were completely correct, 23 per cent partly correct and 12 per cent incorrect; the same distribution applied to basic offender features. As far as the age of offenders is concerned, Fahsing et al. (2004) found that bank-tellers tended to overestimate the age of the youngest one-third of bank robbers (16–21 years) by 3.1 years on average, and to overestimate the age of the oldest one-third (40–50 years) by 10.3 years on average. Offender age estimates in the intermediate age group (25–35 years) were impressively realistic. In other words, real-life bank-robbery eyewitnesses exhibited a tendency for regression to the mean in their estimates of offender age.

Despite the fact that our judgements about other people are influenced by factors apart from their facial appearance (Lerner and Korn, 1972), very limited attention has been given to ‘the role of non-facial information such as body shape, dimension and movement in person perception and recognition’ (MacLeod et al., 1994:125). In demonstrating the relevance of whole-body information to eyewitnesses MacLeod et al. cite a study by Barclay et al. (1978); which found that subjects can accurately identify the gender of targets just by means of a moving light on each ankle. MacLeod et al. reported that when they asked subjects whether two people in a film were of similar or different body size, subjects were significantly more likely to perceive an ambiguous shove by the perpetrator as aggressive or violent if the perpetrator was perceived to have been large and the victim small (p. 128). It is worth noting in this context that witnesses’ estimates of an *offender’s size* can be influenced by post-event information. Christiansen et al. (1983)⁴³ showed that telling subjects that a male person they had encountered earlier on was a truck driver gave heavier weight estimates than when he was described as a dancer.

As far as the *height of perpetrators* is concerned, Van Koppen and Lochun (1997) found that the degree of accuracy between witness descriptions and police descriptions was 52 per cent, while Flin and Shepherd (1986) identified a tendency by members of the public to underestimate the height of a male person who had earlier on asked them for directions in a busy city centre. Furthermore, it was also found that the subjects' degree of inaccuracy in estimating height was related to their own height, with shorter ones being the more likely to underestimate. Regarding the race of a suspect, witnesses in Van Koppen and Lochun (1997) were accurate in 60 per cent of the robbery suspects. The *ethnicity* of both the witness and the perpetrator has been shown to be an important factor in estimating someone's height. Chen and Geiselman (1993) reported that Caucasian and Asian subjects recalled an Asian perpetrator as being shorter than a Caucasian one, despite the fact they were both of exactly the same height. Caucasian, Hispanic and Asian subjects in Lee and Geiselman's (1994) study first saw a photo of a Hispanic, Caucasian or Asian male (all of the same height, 1.71 m) and then watched a 40-second videotape of a robbery featuring the same male as the perpetrator. Subjects were tested in groups of one to five immediately after viewing the videotape. It was found that the Caucasian, who was shorter than the normative height for Caucasians (1.73 m), was recalled as being taller than his actual height. Pooling the results from Chen and Geiselman (1993) and Lee and Geiselman (1994), it appeared that perpetrators from different ethnic groups who differ from their own ethnic height are likely to be remembered by witnesses as being more consistent with their normative ethnic height than their actual height.

It is sometimes the case that a witness sees a *perpetrator's back* and *gait* as he/she is leaving the scene of a crime. There is some limited evidence that people can accurately: (a) distinguish the two genders; and (b) identify individuals known to them on the basis of gait (Cutting and Proffitt, 1981). Alas, as far as it has been possible to ascertain, there has been no research into the accuracy of identifying strangers viewed by their gait. According to MacLeod et al. (1994), 'one's own physical characteristics can affect judgements about the height and weight of other individuals' and people use their own body measurements 'as norms, or anchors, against which relative judgements are made' (p. 129). On the basis of their work on descriptors, the importance people attach to static body features (for example, height, build/weight and torso) and moving individuals (for example, smoothness of gait, pace and length of stride), MacLeod et al. advocate utilising whole-body information in computer searches for suspects during criminal investigations. In many offences, the offender is a stranger to the victim and the police may ask the victim-witness to describe facial characteristics of the offender (see chapter 9). According to Ellis (1984) and Shepherd and Ellis, (1996), such external features of a face as hair is what people normally rely on to describe faces and to recognise an unfamiliar face (O'Donnell and Bruce, 2000; Shepherd, Ellis and Davis, 1982). Of course, it is very easy for an offender to minimise the risk of a witness recognising him by simply disguising his facial appearance by wearing dark glasses, a hat

or a mask. In such cases, it is almost impossible for witnesses to identify the suspects (Narby, Cutler and Penrod, 1996; Shapiro and Penrod, 1986). When witnesses describe someone's face from memory they have been found⁴⁴ to refer to *hairstyles* (27 per cent), less to *eyes* and *noses* (14 per cent) and the *shape of someone's face* (13 per cent). Interestingly enough, witnesses in Van Koppen and Lochun (1997) were accurate for *accents* and *dialects* in 32 per cent of the cases, *moustaches* (3 per cent) and *beards* (1 per cent). There is no doubt that psychologists should pay more attention to witness identification accuracy for perpetrator appearance in general, rather than just for facial features. Furthermore, such research should aim to identify interaction effects between characteristics of the event, the eyewitness, the perpetrator and the questioning by police. Only then will psychologists be able to provide a holistic picture of eyewitness testimony from the forensic point of view.

CASE STUDY

Identifying a familiar war crime perpetrator

The discussion in this and the previous chapter is about eyewitnesses to everyday crime that form the stable diet of law enforcement and the courts worldwide. However, in addition to courts at the national level, witnesses testify in trials conducted by International War Crimes Tribunals of persons accused of genocide, war crimes, and crimes against humanity (see Cassese, 2003; Kapardis, 2005). International criminal law and international criminal justice is another area of interest of the present author. The massive crimes committed, the large number of perpetrators, the circumstances under which such international criminal law offences were perpetrated in the former Yugoslavia and in Rwanda, for example, and, finally, the conditions under which International War Crimes Tribunals conduct trials, add another dimension to the concepts of 'eyewitness' and 'perpetrator'. Furthermore, at such tribunals, 'the defense usually adopts a strategy to concede all the crimes charged, but to deny that the accused was involved, As a consequence, identity is the major, if not the only problem' (p. 9). With permission from Professor Willem Wagenaar, who testified as expert witness before the International Criminal Tribunal for the Former Yugoslavia, the case of Vlatko Kupreskic (IT-95-16) is described briefly to illustrate some of the difficulties in perpetrator identification, utilising material he kindly made available to the present author.

According to the witness, there was a group of men shooting from his neighbour's house. The neighbour belonged to the other ethnic community. About 30 minutes before sunrise, still in the dusk, the witness, his wife and children attempted to

escape. At first they moved, protected by the cover offered by a slight hill but then they had to cross an open space, approximately 60 metres from the neighbour's house. His wife was shot (she later died of her wounds). The witness looked back, saw a number of men in different uniforms shooting at them. At the time he did not recognise any of them but two days later he realised one of them had been his neighbour Kupreskic. Professor Wagenaar pointed out that: illumination was very poor (possibly less than 30 lux); under the circumstances, observation time was very brief; the distance of 60 metres made accurate recognition unlikely; since the shooting had gathered before the neighbour's house, the witness may, therefore, have expected to see his neighbour; the witness may well have reconstructed the image of his neighbour shooting at his family after the event; and, finally, no family member of the witness who knew the accused confirmed what the witness claimed. The tribunal accepted Professor Wagenaar's arguments and acquitted Vlatko Kupreskic.

3 INTERROGATIONAL VARIABLES

Being unable to access and retrieve information stored in our memory is a common experience and underpins a lot of forgetting (Tulving, 1974, 1983). We have seen already that recall accuracy of an event or a face is associated with a number of event, witness and perpetrator factors. The report of a witness' memory can be modified during the retrieval stage by such factors as mode of recall, the context in which retrieval takes place, how questions are worded and pressure on the witness to remember. In other words, inaccuracy can be introduced into eyewitness evidence by police and court procedures used to elicit such testimony. Experienced police and other investigators know only too well that well-informed and skilled interviewing is a crucial factor in dealing with suspects. Fortunately for them, unlike a few years ago, there is now a very large body of knowledge on which to draw and very useful books on the topic.⁴⁵

Retention interval: memory issues arise in the law in a variety of contexts. In fact, the law's assumptions about memory impact (for example, on statutes of limitations) are implicit in the procedures governing the jury's function (Johnson, 1993:604–5). Thus, in the case of civil actions for childhood sexual abuse in the United States: 'Many courts and state legislatures have recently recognised an exception to the traditional statute of limitations' (p. 604; see Hagen, 1991; Kanovitz, 1992). In most cases, witnesses to a crime will be asked to describe what they saw happen some time after an incident. This is known as retention interval. In real life this delay can range from a few minutes to a few months and even years. To illustrate, in the late 1980s a Jerusalem court tried, convicted and sentenced to death as a Nazi war criminal John Demjanjuk, then an American citizen who had been deported to Israel to face trial as 'Ivan the Terrible', a camp guard at Treblinka

concentration camp, who was responsible for the extermination of 850 000 Jews there in the Second World War. The defendant protested his innocence but to no avail. To the embarrassment of both the Israeli and United States governments he was released when access to wartime archives following the collapse of the Soviet government established the true identity of the real 'Ivan the Terrible'. The court believed nine elderly witnesses, not the expert testimony for the defence by Professor Willem Wagenaar of Leiden University in the Netherlands (see Wagenaar, 1988; Cutler and Fisher, 1993). It is comforting to know, therefore, that the time interval (delay) between crime and identification was considered by the potential jurors in Lindsay's (1994a:372) questionnaire survey to be the most important determinant of eyewitness identification accuracy.

In a study (unpublished) by the present author on behalf of the Victoria Police Identification Squad in Melbourne in 1994 of 1634 actual victims/witnesses interviewed by specialist police personnel in Melbourne, it was found that over half (52 per cent) of the witnesses were interviewed more than three days after the offence had been committed; in fact, 37 per cent of them were not interviewed until five to six days after the commission of the crime. During the intervening period their memory of the event would generally deteriorate as a result of inevitable, normal forgetting as well as interference (see below). It is well established in psychology that recall and recognition accuracy declines as a function of time (Hunter, 1968; Thomson, 1984; Shapiro and Penrod, 1986). Recall and recognition is at its best immediately after encoding information, but both decline, rapidly at first, and then gradually. This means that often the original statements of witnesses are a great deal more accurate than what they remember months, or sometimes even years, later at the trial. Face recognition and person identification, however, in an identification parade (see below) has been found to be more resistant to the adverse effects of delay in recall (Deffenbacher, 1989; Ellis, 1984; Loftus, 1979; Shepherd et al., 1982). This does not mean, however, that long delays in recall are justified because long delays significantly increase the likelihood of post-event memory interference (see below) as well as distortion and misidentification. Therefore, in order to enhance witnesses' accuracy, police would be well advised to obtain a witness' description of a suspect's unfamiliar face as soon as possible.

As the criminal law stands in common law countries, the basic evidence is what witnesses tell the magistrate, judge or jury during the trial, months, or even years later in some cases. If the judge permits, after counsel has applied for permission, a witness giving evidence may refresh his/her memory by reference to any writing concerning the facts to which he/she testifies, made or verified by the witness at a time when their memory was clear (Att-Gen.'s Reference (No. 3 of 1979), 69 Cr.App.R. 411, CA (per Lord Widgery CJ., at p.414) cited in Archbold, 2000:1058). If a witness' present testimony is inconsistent with statements he/she made to the police earlier, the lawyer for the other side will refer to these inconsistencies in cross-examination in order to discredit the witness. Despite the fact that 'The alteration of recollection appears to be a fact of life' (Williams et al.,

1992:149), the basic legal position and practice seriously undermine the credibility of the processes by which relevant facts that are in dispute in a trial are established. Stuesser (1992) has advocated reforming the law (in Canada) so as to leave a discretion with the trial judge to admit prior inconsistent statements for their truth, where the statements are seen to be both reliable and necessary. The main reason for allowing prior inconsistent statements to be admitted for their truth is that the person who has made the statements is in court and can be examined. Adopting a practice of admitting the original statement as the primary evidence has also been advocated by Thomson (1984:111) in Australia, on the grounds that evidence can only be useful if it is accurate and by admitting the original account as the primary evidence will also prevent a dishonest witness from making up a story.

Type of recall: a witness may be asked to tell everything they saw happening during an incident in their own words and at their own pace. This is known as 'free recall' and it would be normal police practice to follow it with cued, 'interrogative' recall. According to Hollin (1989), the distinction between 'free' and 'interrogative' recall was made by Binet (1900). Experiencing difficulty in remembering, a witness may well hesitate. Rather unwisely, police investigators may encourage a hesitant witness to 'have a guess' in furnishing a physical description of the suspect, for example, or in picking him/her out from a photospread, an identification parade or in a 'show-up' (see chapter 9). Such encouragement has been shown to have an adverse effect on accuracy later on.

Psychologists have known for a long time that, generally speaking, an interrogative recall produces a greater range of information (that is, it is more complete) than free recall, but it is less accurate. In contrast to what early researchers⁴⁶ reported, the picture for the effect of mode of recall on testimony is more complex; interrogative, structured questions can lead to more complete recall but also produce more inaccuracy when asking a witness about difficult items of information (see Clifford and Scott, 1978). In other words, from the point of view of law-enforcement personnel, testimony accuracy and completeness are directly related to how specific a question is as well as how difficult is the information being asked of the witness. Police investigators, therefore, need to be aware of the trade-off here.

Number of efforts made to recall: repeatedly recalling stories was an issue that attracted the attention of Bartlett (1932) and its significance was noted by Penrod et al. (1982), for example, but the number of studies devoted to it are few in number.⁴⁷ Both laboratory and survey studies have found that the amount of cognitive effort influences the quality of recall (Jobe et al., 1993:573). Hypermnesia, first observed by Ballard (1913),⁴⁸ is a phenomenon of improved memory performance with repeated testing. In fact, one of the recommendations of the architects of the cognitive interview technique⁴⁹ that enhances eyewitness accuracy is to solicit multiple recalls from witnesses in order to increase the amount of information provided (see below). Payne (1987) suggested that 'hypermnesia' be used to refer to increases in net recall in successive trials and 'reminiscence' as referring to gains in gross recall.

As would have been expected on the basis of the literature on the usefulness of the cognitive interview, in a series of experiments Turtle and Yuille (1994) obtained evidence supporting the reminiscence notion, that ‘multiple eyewitness recalls can be beneficial in terms of overall recall without a severe increase in errors’ (p. 268). As for how hypermnesia and reminiscence occur, Turtle and Yuille (1994:261) accept a process, put forward by Estes (1955), as stimulus sampling, that is, as witnesses repeatedly attempt to access their memory they obtain different samples from a population of potential information about the trace in question. Like Turtle and Yuille (1994), Otani and Hodge (1991) found no support for hypermnesia in two forced-choice recognition experiments. Otani and Hodge, however, found support for hypermnesia in two cued recall experiments and explain their findings in terms of relational processing that increases the availability of retrieval cues and thus aids recall of target words.⁵⁰ Turtle and Yuille (1994) remind us that while repeated recall may well produce more accurate information for the police investigation, any inconsistencies between successive accounts by the witness will be useful ammunition for the lawyers in court to discredit such a witness.

Post-event interference: it is common police practice to ask witnesses to a crime for a verbal description of the suspect/s, to assist in making a photofit or an artist’s impression with or without the aid of a computer, and to also ask witnesses to take a look at photographs of known offenders and try and identify the suspect they have seen. In addition, police may later ask a witness to identify the suspect in an identification parade/line-up (see chapter 9). It is interesting to note in this context that the Devlin Committee (1976) examined all line-ups in England and Wales in 1973 and found that 347 cases were prosecuted when the only evidence was identification by one or more eyewitnesses. Three-quarters of the accused were convicted. The significant impact of eyewitness testimony on findings of guilt is also documented by experimental studies (see Loftus, 1974; Wells et al., 1979). According to Milne and Shaw (1999), ‘The proper use of questions is itself a complex skill. The complexity arises because different types of question produce different types of answer and it is essential that particular classes of question are used in their correct way’ (p. 129). In asking witnesses questions the police may inadvertently contaminate the witness’ memory.

A very popular paradigm for eyewitness testimony researchers since the mid-1970s has been the use of the ‘misinformation’ paradigm to study how and when information encountered after an event contaminates a witness’ memory and makes it unreliable. Documenting, of course, that false memories (that is, incorrect beliefs about past events that have become part of our recollection of and believed by us to be accurate) can be implanted, raises the question as to the underlying mechanism (see below). The considerable interest in the misinformation effect that first manifested itself in the late 1980s and was evident by studies⁵¹ *inter alia* in the United States,⁵² in Australia⁵³ and in Germany.⁵⁴ In such studies, planting misinformation on subjects has been found to lead to misrecall, a witness remembering a car as being of a different colour, a ‘give-way’ sign as a ‘stop’ sign, seeing broken glass

and even a barn never seen (Williams et al., 1992:149). Similarly, as a result of misinformation, a man with a moustache, straight hair, a can of cola and breakfast cereal were recalled as clean shaven, curly hair, a can of peanuts and eggs respectively (Hoffman et al., 1992:293). There is disagreement among cognitive psychologists whether the later information causes an irrevocable alteration of the original memory, or whether the original memory is retrievable under appropriate circumstances (see below). There is, however, consensus among researchers that memory can be contaminated by means of leading questions (see below).

There have been a number of attempts to account for the post-event information/misinformation effect in terms of a theoretical mechanism. Loftus et al. (1978) proposed the 'trace-alteration account' (that is, the original memory trace is altered or updated), while Saunders and MacLeod (2002) suggested that the memory of the original information is inhibited when one retrieves misinformation. Finally, others (for example, McCloskey and Zaragoza, 1985) maintain that information from the original memory trace remains unaltered and under the right conditions it can be recalled despite the post-event information effect. More research is needed before it can be decided which of the different explanations is the more plausible.

Leading questions: during a trial a lawyer is generally not allowed to ask leading questions either in examination-in-chief or in cross-examination, that is, questions suggesting how a lawyer wishes a witness to answer them (Waight and Williams, 1995:251). However, according to Archbold (2000:1058), the answers to leading questions are per se inadmissible (*Moor v. Moor* [1954] 1 WLR 927) although the weight that can properly be attached to them may be substantially reduced (*R v. Wilson*, 9 Cr.Ap.R.124, CCA). It is stated in Archbold that there are exceptions to this general rule: (a) if a witness swears to a certain fact and another witness is called in order to contradict him, the latter witness may be asked directly whether the fact did occur; and (b) counsel for the party that has called a witness may ask him leading questions if he has leave from the court to treat him as hostile (p. 1058). Practising lawyers might be interested to know that, from a psychologist's point of view, asking a witness a question is analogous to an experimental treatment situation and the type of question and manner of asking it impacts on the answer given (Lilli, 1989:223–4).

An easy way of contaminating someone's memory of an event (that is, introducing errors) is to ask them a leading question containing a piece of false information supposedly present in the original incident.

A very common method of contaminating someone's memory of an event (that is, introducing errors) is to ask them a leading question containing an item of information that never existed in the original incident. In a study by Loftus and Palmer (1974) subjects viewed a film of a car accident and were asked to estimate the speed of the car at the moment of impact. It was found that estimates of speed varied as a function of the verb used to describe the accident. Asking subjects how fast the cars were travelling when they 'contacted' one another as opposed to when they 'smashed' into each other yielded speed estimates of 31.8 mph and 40.8 mph respectively. Furthermore, when subjects were later asked to describe the accident it was found that those exposed

to the 'smash' condition were more likely to report having seen broken glass at the scene of the accident when, in fact, none existed.

One relatively straightforward way of creating a false memory was reported by Roediger and McDermott (1995). It involves asking subjects to remember a list of words. Later, they are unexpectedly asked to remember if a particular word was in the original list. People remember critical non-presented words, with those who score higher on measures of dissociation being more likely to do so (Winograd et al., 1998). Available evidence, however, suggests that the correlation with dissociative tendency may not apply to autobiographical memory (Wilkinson and Hyman, 1998). That people systematically develop false memories for unseen aspects of an event has also been documented by a number of recent studies. Forty per cent of subjects in a study by Ost et al. (2002) said they had seen a non-existent film of the car crash in Paris a few years ago in which Princess Diana was killed, the majority of subjects in a study of the sinking of the *Estonia* ferry by Granhag et al. (2003) claimed to have seen a non-existent film of the event, and two-thirds of undergraduate subjects in a Dutch study by Jelicic et al. (2006) said they had seen non-existent footage of the assassination of Dutch politician Pim Fortuyn (see also Smeets et al., 2006). Finally, available evidence suggests that the tendency by witnesses to develop false memories of unseen aspects of an event applies especially to missing non-crucial than missing crucial information (Gerrie et al., 2006). It is now well established that subjects exposed to misleading post-event information are likely to report such information on subsequent memory tasks and to do so confidently.⁵⁵ Loftus et al. (1978) found that the greatest post-event contamination/misinformation effect occurs when the misleading information is introduced following a long delay after acquisition and before recall. Dristas and Hamilton (1977)⁵⁶ reported that post-event information interferes more easily with peripheral, rather than central, features of one's memory of an incident. The available literature leaves no doubt that asking a witness questions can influence their memory of an event. Loftus and Zanni (1975) reported that the presence of the indefinite article ('a') instead of the definite article ('the') gives rise to different expectations about the existence of an object. Using 'the' significantly increases the percentage of subjects who say they saw something that was not present in a film.

The literature on post-event misinformation has given rise to an ongoing controversy regarding whether the new information changes the original memory – the 'integration' view (see Loftus and Ketcham, 1983) – or whether the effects found by Loftus are attributable to the processes used rather than to permanent changes in memory.⁵⁷ Some authors have referred to the controversy as 'memory wars' or even 'religious war' (Pezdek and Banks, 1996:xii). Zaragoza and Koshmider (1989) argued that misinformation-based responses do not necessarily mean that the witnesses actually believe the details concerned happened in the original event; that subjects' responses are indicative of 'demand characteristics'. McCloskey and Zaragoza (1985), in fact, expressed the view that memory for an original incident is not impaired by post-event contamination and advocated the 'coexistence'

theory, that is, that the original memory could become accessible under appropriate circumstances at retrieval.

Bonto and Payne (1991) examined the effect of varying the context of presentation of the original event and the post-event information and found it did not have an effect on subjects' performance. The robustness of the misinformation effect has been further reinforced by Weingardt et al.'s (1994) study, which found that even when subjects were instructed to exclude suggested items from their recall lists they continued to include them. This finding led them to conclude that: 'Witnesses can exhibit strong beliefs in their memories, even when those memories are verifiably false' (p. 25). Lindsay and Johnson's (1987) own work in this area has produced results that are consistent with Loftus and her associates. Lindsay and Johnson (1987) and Lindsay, D.S. (1994), however, proposed that a satisfactory explanation for the misinformation effect lies in what they term 'source misattribution' by witnesses in terms of their source monitoring processes, that is, that although the original event and the post-event information may exist in the memory, misled subjects may experience confusion as far as sources of the two types of information is concerned (see below).

Work by Dutch researchers at the University of Maastricht⁵⁸ also shows that when witnesses discuss details of what they saw with one another⁵⁹ they do influence one another. This kind of situation has been termed 'collaborative storytelling'. Merckelbach et al. (2007) investigated the corruptive effects on memory of a confederate in a social contagion paradigm (see Roediger, et al. 2001) suggesting incorrect details or denying correct ones. They found that denying correct details influenced subjects who had been shown six different pictures on a computer screen as much as suggesting incorrect information. More specifically, 70 per cent omitted previously mentioned but confederate-denied, while 52 per cent incorporated incorrect details in their free recalls. As would have been expected, being misled by a confederate correlated significantly with having a higher score on the Gudjonsson Compliance Scale (see Gudjonsson, 1989), a forensic tool measuring one's eagerness to please. There is a need to replicate Merckelbach et al.'s finding with a more heterogeneous sample. Finally, Itsukushima et al. (2006) reported that the co-witness misinformation effect is greater if it is presented in written than in audio-visual form.

Watkins (1990) suggested that cognitive psychology may not be able to resolve the question of whether misleading post-event information does, in fact, alter memory traces or simply makes them less likely to be retrieved. It is unlikely this fierce debate between the 'integration' and 'coexistence' views of post-event influences on memory will be resolved in the very near future. It is, therefore, worth remembering that both sides to the dispute are in agreement that post-event misleading information can have a significant effect on what a witness remembers and the accuracy of his/her testimony. Finally, available research indicates that post-event contamination by interviewing police officers is more likely when a witness believes the police know exactly what happened (Smith and Ellsworth, 1987). This finding is of particular importance when it is remembered that both developmentally

handicapped and mentally disordered witnesses are particularly vulnerable to the misinformation effect (Gudjonsson, 1995a; Perlman et al., 1994).

4 MISINFORMATION DUE TO SOURCE MONITORING ERROR

Cognitive psychologists (Johnson et al., 1993) use the term ‘source monitoring error’ to refer to cases where a witness confuses what he/she has experienced with what he/she has seen on television or heard about from other people, between what is real and what is imaginary. The result is that the witness remembers misinformation. A real-life example of this type of error was provided by Crombag et al.’s (1996) study of witnesses in the wake of the Israeli airline El Al Boeing 747 crashing into apartment buildings in Amsterdam. Even though no one had filmed the crash, the researchers found that 60 per cent said they saw the plane crash on television and many of those gave detailed answers to questions. It would appear that people in the study pieced together what they had heard about the crash from different sources to construct an image of the crash, and then accepted the suggestion that they had watched it on television.

5 REPRESSED OR FALSE-MEMORY SYNDROME?

Before considering the recovered memory controversy in detail, let us first consider some of the key terms used, drawing on Memon et al. (2003:127–130). ‘Trauma’ is used to describe an experience that has threatened the health or well-being of a person (p. 129).⁶⁰ ‘False memories’ are typically defined as incorrect beliefs about past events that a person has ‘incorporated and experienced as genuine memories’ (p. 127).⁶¹ Broadly speaking, the term ‘recovered memories’ ‘refers to the reporting of childhood events for the first time by adults who have been previously unable to remember these events or the circumstances surrounding them’ (p. 128). The term ‘discovered memories’ (Schooler et al., 1997) has been put forward to replace ‘recovered memories’. ‘Repression’ refers to defence mechanisms that are unconscious (that is, involuntary) and exclude threatening material from entering our conscious awareness (p. 128). When these defence mechanisms operate involuntarily, we talk about ‘suppression’. Empirical evidence for repression has come from experimental studies and case studies (both retrospective and prospective) in clinical contexts. Memon et al. (2003:130–34) critique studies of repression and conclude that ‘the evidence for primary repression [that is, involuntary repression] is sparse and that intentional forgetting or suppression may account for the previous unavailability of childhood memories’ (p. 145).

Until the early 1980s reports of abuse, especially sexual abuse, said to have taken place many years earlier in childhood and not reported for years, were rare indeed. Since then, however, such reports have become increasingly more common. Therapists use a diversity of alternatives⁶² to ‘assist’ their clients to ‘recover’

their allegedly repressed memories, including hypnosis, eye movement desensitisation and reprocessing (EMDR), age regression, psychodrama, visualisation, guided imagery, imagination inflation, dream interpretation, use of family photographs, support groups, body work, art therapy, group therapy, dream interpretation, having the client read popular books on the subject and various drugs. Interestingly, research in the Netherlands by Geraerts et al. (2006) found that people reporting recovered memories of abuse are not characterised by symptom over-reporting. Jurors have also been found to rely on a witness' repressed memory of a crime in order to convict a defendant of murder (see Brahams, 2000, for an American case). The focus here, however, is on recovered alleged cases of childhood sexual abuse.⁶³

The following case from Western Australia, cited by Freckelton (1996), illustrates the use of a series of psychotherapeutic interventions in repressed memory syndrome. In the *Bunbury* case (*R v. Jumeaux* [unreported, Supreme Court, WA, 23 September 1994]), claiming their memories had been repressed, two daughters made 65 allegations of sexual abuse against their father. Daughter A underwent psychotherapy after her depression had not responded to antidepressants. Earlier on she had described uncomfortable feelings after recovering from an anaesthetic. During psychotherapy she experienced 'abreaction', that is, a free expression or release of an emotion that has been repressed. She also later had flashbacks of abuse, both in and outside therapy. While daughter A was undergoing psychotherapy, her sister sought the help of a medical doctor out of concern that her own memories of sexual abuse might have been repressed. She came to 'recover' memories of such abuse after being hypnotised a number of times and seeing two medical practitioners. At the trial a number of experts testified on the topic of repressed memory syndrome. Justice Seaman stated that, 'evidence based upon memories by various forms of counselling and psychotherapy have similar inherent dangers; namely, the production of false evidence by means of suggestion' (cited in this context by Abadee J. in *Tillott v. The Queen* [unreported, *Crt Crim App*, NSW, 1 September 1995, cited by Freckelton, 1996]). Available research evidence from New Zealand shows that discussion among siblings can influence both true and false autobiographical memories (French et al., 2006). In *R v. Bartlett* [1996] 2VR 687, the Court of Appeal of the State of Victoria established the legitimacy, in certain circumstances, for the defence in criminal trials to adduce suitably qualified expert evidence about the unreliability of recovered memories of abuse (see also chapter 7 in this volume).

Broughton (1995:93) points out:

- the mental health of most survivors of sexual assault deteriorates significantly as a result of their participation in the criminal justice system
- such survivors are degraded and humiliated immensely during the cross-examination
- in most cases, if the offender pleads not guilty, he is acquitted.

Victims of childhood sexual abuse who pursue legal redress because they want justice, are, therefore, advised by experienced criminal lawyers specialising in sexual assault (for example, Broughton, 1995, in Melbourne, Australia) to apply, instead, to the Criminal Injuries Compensation Tribunal, after reporting the crime/s to the police.

Mock-jurors in the United States have been found to be more likely to believe a plaintiff in a repressed memory of sexual assault case if the number of assaults was 30 rather than one; and if the victim reported the assault/s to the police immediately rather than if there was a 20-year delay (Golding et al., 1999). Coleman et al. (2001), too, investigated what makes recovered-memory testimony compelling to mock-jurors and found that they considered the victims' testimony as more accurate and credible and decided in favour of the victim if the therapist had used hypnosis. The opposite was found if the therapist was being sued for having used hypnosis to influence a client's recall of false memories of abuse.

Given cognitive psychologists' belief in the malleability and suggestibility of memory, it comes as no surprise to be told they have been at loggerheads with psychotherapists over the issue of recovered memories of childhood sexual abuse (see Thomson, 1995b, and Freckelton and Selby, 2005:410–31 for a discussion of the false memory syndrome). Whilst not disputing that child sexual abuse exists and is serious, the concern expressed by some cognitive psychologists is that memory-recovery therapies may lead clients of psychotherapy to, in fact, create illusory memories and that there exists a high rate of false diagnosis of child sexual abuse.⁶⁴ Of course, such unintended confabulation (see Shobe and Schooler, 2001) could result in wrongful convictions. That is exactly what happened in the case of George Franklin who was convicted in 1990 of the murder of a child, mainly on the evidence of his daughter who alleged she had repressed the homicide of her friend for 20 years (Maclean, 1993).⁶⁵ Franklin's conviction was quashed in 1995. As already mentioned, concern about recovered memories of abuse has been expressed by the judiciary in Australia (see also, *R v. Thorne* [unreported, Crt Crim App, Victoria, 19 June 1995]). According to Freckelton (1996), the same concern has also been voiced in judicial judgements in the United States (see *New Hampshire v. Hungerford and Morahan* [unreported, Superior Court, New Hampshire, Hillsborough County, 23 May 1995]) and in Canada (see *R v. Norman* (1993) 87 CCC [3d] at 168–9). However, 'The admissibility of expert evidence about repressed memory syndrome and false memory syndrome remains to be authoritatively determined throughout common law jurisdictions' (Freckelton and Selby, 2005:422), and 'Repressed memory syndrome could not at this stage qualify as reliable under the [US] *Daubert* test of falsifiability, the test that governs the admissibility of scientific evidence generally under the *Federal Rules of Evidence* (US)' (p. 430).

Concerned that memories of childhood sexual abuse may be falsely implanted or encouraged by mental health professionals without regard for their accuracy, Slovenko (1993) argued the need for corroborating evidence of abuse in order to justify the application of the discovery rule in such cases in the United States.

For its part, the Australian Psychological Society (1995) in its *Guidelines Relating to the Reporting of Recovered Memories* exhorts psychologists to exercise ‘special care’ in dealing with allegations of past abuse (see also American Psychiatric Association, 1993, *Statement on Memories of Sexual Abuse*). The American Psychiatric Association warned in its 1993 position paper that repressed memories could be false, especially if recovered in the context of therapy. The final report by the American Psychological Association’s Working Group on Memories of Childhood Abuse published in 1996 made clear the fact that the Committee was deeply split (see below). The Canadian Psychiatric Association’s 1996 position paper cast doubt on the reliability of recovered memories from early childhood and urged its members to be particularly careful in their use of memory enhancement techniques. In the same year, the Canadian Psychological Association’s report expressed serious concern that some professionals may unintentionally create false memories of childhood abuse, causing harm to clients and their families. The Australian Psychological Society’s *Ethical Guidelines*, 2004 (6th edition) include a section (pp. 65–9) relating to recovered memories where it is stated that there is general agreement, *inter alia*, about the following two points:

- ‘Child sexual abuse should not be retrospectively assumed solely on the basis of presenting symptoms’ (p. 65)
- ‘All memories are susceptible to revision and influence from the time of encoding up to and including the time and context of retrieval, as well as in the disclosure and reporting process’ (p. 65).

Society members are also advised that, since the accuracy of childhood sexual abuse memories in the court cannot be ascertained without corroboration, they should be cautious if clients ask about legal action (pp. 67–8).

In the UK the Royal College of Psychiatrists’ Working Group on Recovered Memories published its *Guidelines for Practice* in 1996, rejecting the concept of massive repression. According to Brandon (1999), the Working Group ‘did not find convincing evidence that repeated sexual abuse is ever completely forgotten’. As shown in the next chapter, it is well established in the empirical psychological literature that memory for early childhood events is poor. Furthermore, as Thomson (1995b:200) reminds us, examining childhood memories is inherently difficult.

Lindsay and Read (1994:294–8) and Loftus (1993:525–6) attribute the alleged high rate of false diagnosis to both popular publications on child sexual abuse⁶⁶ and poorly trained therapists who unintentionally, perhaps, suggest to their clients that they must have been sexually abused as children on the basis of insufficient evidence, leading: (a) to numerous legal cases on both sides of the Atlantic involving allegations of child sexual abuse (in the main, incest) by men and women in the wake of memory recovery therapy;⁶⁷ and (b) to legal reforms permitting plaintiffs to sue for recovery of damages for injury suffered as a result of child sexual abuse within a period (up to three years in Washington, for example) of the time they

remembered the abuse (see Sales et al., 1994, regarding the admissibility of child sexual abuse memories in the United States) and to even bring criminal charges against their alleged abusers many years later (see Loftus, 1993:520–1). Such critics of memory-recovery therapies point to the evidence for suggestibility of memory, and maintain that not only is repression a rare phenomenon (Read and Lindsay, 1994:418) but it also lacks scientific support (Loftus, 1993:519) and is therefore problematical as an explanation for recovered memories (Thomson, 1995b:101). It has also been argued that there is no conspicuous syndrome of child sexual abuse (Ceci and Loftus, 1994:354) and that memory-recovery therapists make very questionable assumptions about the human memory (for example, that people can remember events in their childhood that took place before the age of five, despite the evidence for ‘infantile amnesia’; see Fivush and Hammond, 1990) that are not consistent with the weight of the empirical evidence provided by cognitive psychologists (Lindsay and Read, 1994:284, 286). In the light of the various arguments against repression as an explanation for recovered memories of abuse, Thomson (1995b) has argued that an explanation of such memories in terms of ‘suppression’ (that is, when someone chooses not to report a particular event they are aware of and remember it for one reason or another) is more convincing than repression (p. 202).

Undoubtedly, a major criticism that has been levelled against memory-recovery therapists is that they are subject to ‘confirmatory bias’ (that is, they tend to search for evidence that confirms rather than disconfirms their own hunches) and thus lead their client’s memory with suggestions about childhood sexual abuse (Loftus, 1993:530). Research in Australia by Thomson (1995b) has also found that such therapists’ own expectations of what may have happened affects the types of questions they ask, which, in turn, influence what the interviewee reports of the original event. In other words, ‘people’s memory of a particular event can be shaped in more subtle ways via direct suggestions’ (p. 104). Finally, Thomson (1995b) found that there is no scientific evidence that memory recovery therapy is effective. Accepting these arguments casts serious doubt on a range of legal changes introduced, perhaps prematurely, to facilitate criminal and civil action against the alleged abusers (Wakefield and Underwager, 1992).

The Recovered or False Memory Debate: Two Contrasting Views

At the basis of the controversy surrounding recovered memories of child sexual abuse are two contrasting schools of thought. On the one hand, there are those who are prepared to rely on assumptions, to infer internal psychological states and mental processes even though they lack scientific support. The psychotherapists who identify with this school of thought tend to accept without question what clients tell them and/or to encourage such ‘revelations’ by means of suggestive questioning (Wakefield and Underwager, 1992:503). On the other hand, there are

those cognitive psychologists who are concerned about the claims being made by therapists regarding recovered memories of child sexual abuse because they espouse a constructive model of human memory, in the Bartlett (1932) tradition.

A number of authors, however, have defended memory-recovery therapists against the onslaught by the cognitive psychologists. Berliner and Williams (1994) pointed out that the polarised debate is really a dispute between academic researchers and clinicians, with each group pursuing their different goals (pp. 384–5), and argue that Lindsay and Read (1994) exaggerated the significance of a few studies, claiming that these studies have produced false reports (p. 380), charge them with selective use and evaluation of studies (p. 381) and maintain that: ‘While there is evidence based on laboratory studies for the fallibility of memory, suggestibility and inaccuracy, it has not been proven that full-blown memories for traumatic childhood experiences can be created from nothing’ (p. 385). Berliner and Williams suggested that if cognitive psychologists spent more time investigating the effects of trauma on memory as well as alerting us to the dangers of some clinical practices, the debate would be less polarised (pp. 385–6). In their rejoinder to the commentaries by Berliner and Williams (1994) and Redzek (1994), Read and Lindsay (1994) defended the claims they make about memory-recovery therapists, make the point that a minority of such therapists (who use highly suggestive techniques and are in need of some retraining and education by cognitive psychologists) contribute a disproportionate number of ‘tragic false alarms’ but concede that ‘some cases of inaccurate delayed accusations might be better characterised as involving false beliefs rather than illusory memories. The reason this is important is that it is probably much easier to induce false beliefs than it is to induce full blown illusory memories’ (p. 429). On the basis of there being 250 000 therapists in the United States, 10 per cent of whom, with caseloads of 29 clients per year, use highly suggestive techniques that are applied to non-abused patients 10 per cent of the time and create illusory beliefs and memories of child abuse in only 10 per cent of such cases, Read and Lindsay (1994:416) estimated 5000 cases of false alarms a year, that is, a rate of one per 100 recovery therapy clients ‘treated’ by such memory-recovery therapists.

While the basis of the controversy surrounding recovered memories of child sexual abuse are two contrasting schools of thought (and two antithetical syndromes: repressed memory syndrome vs false memory syndrome),⁶⁸ the fact is, of course, that, as seen earlier in this chapter, there are competing models of memory and the constructionist cognitive psychologists’ case is not as convincing as is presented (see Davies, 1993a). The constructionist camp, however, can point to some hard evidence supporting their model of memory and thus justify their concern to some extent and the ringing of alarm bells about the innocent individuals whose lives are destroyed as a result of accepting what therapists claim. The legal system has been shown to be an ineffective answer to a broad range of societal problems, ranging from alcohol abuse, violence (both domestic and public) and criminal behaviour in general. Finally, there is a crucial sociolegal question about the whole issue: How

valid is the assumption that adults claiming to have recovered memories of childhood abuse stand to benefit more by taking legal action, civil and/or criminal instead of resolving their psychological harms in therapy? Bulkley and Horowitz (1994) posed this very question and, after a lot of serious discussion of the arguments for and against, conclude the answer is a cautious negative one.

Following the excessive claims made for memory-recovery therapy in the 1980s, Read and Lindsay (1994) provided a well-argued, well-intended and timely reminder to psychotherapists to at least be careful with their use of techniques to help their clients recover suspected memories of childhood sexual abuse (pp. 430–1). As a step in the right direction, Ceci and Loftus (1994) suggested that in attending to the needs of true abuse survivors, therapists need to be very conscious of the dangers of suggestive questioning and that failure to be so results in false alarms that cast doubt on the therapists themselves and undermine sympathy for the unfortunate victims of childhood abuse (p. 362). Meanwhile, ‘Because there is no clear way of discriminating between authentic and fabricated memories’ (Thomson, 1995b:104), there is an urgent need to subject the various techniques used by proponents of recovered-memory therapy to procedural safeguards or guidelines as have been adopted, for example, for the use of hypnosis in the *Evidence Code of California* (Freckelton, 1996). In addition, the need for research into how best to discriminate between accurate and illusory memories cannot be overemphasised (Raskin and Esplin, 1991). For therapists, it may be a consolation to know that they can pay and attend workshops advertised as providing adequate knowledge and skills in how best to handle memories-of-abuse cases and so minimise their risk of legal liability, against the backdrop of guidelines issued by their psychological society. Finally, in some jurisdictions such as Victoria, Australia, those victims, whose allegations were believed by juries not warned of the difficulty faced by the accused in proving innocence on uncorroborated and dated sexual abuse charges based on ‘recovered’ memories of sexual abuse, can keep the money awarded them as compensation for their injuries despite the fact that the accused is subsequently acquitted (Arndt, 1995).

Of course, there remains the crucial question of interest to therapists and ethics committees alike, namely, whether the process of reviving memories of past traumas is more harmful than helpful for the client. Australian researchers Brabin and Berah (1995) interviewed 257 mothers and 160 fathers who had a stillborn baby years earlier and found that, of the small proportion (18 per cent) who found the interview distressing, almost all reported that it had also been helpful to them. While Brabin and Berah’s finding is interesting, what they studied is rather different from a victim of child sexual abuse in the family context whose repressed memory is recovered years later and has to learn to cope with the new knowledge and emotions that come with it.

Meanwhile, the optimistic student of legal psychology can take comfort in the fact that in psychology, as in other disciplines, knowledge is often advanced through three stages (Watkins, 1993:309): (a) thesis (that is, when a finding such as

recovered memories of childhood sexual abuse is made in the context of therapy – and there is a spate of studies reported, books published, etc. supporting the basic finding); (b) antithesis (that is, when the earlier reports are challenged by methodologically more robust studies of suggestive questioning); and (c) synthesis, when researchers proceed to resolve the issue by somehow integrating valuable knowledge generated during the thesis and antithesis stages. The synthesis stage in dealing with recovered memories of childhood sexual abuse will involve researchers finding ‘ways of distinguishing verifiable from fantasized or contaminated memories’ (Watkins, 1993:310), undoubtedly a tall order.

Perry and Gold (1995) reported that 15 000 cases of false accusations of sexual abuse had been recorded in the United States in the previous few years, over 300 in Canada and as many in the UK. The tidal wave of ‘repressed or recovered-memory’ cases peaked in the United States in the early 1990s and fanned the debate on the ‘false memory syndrome’. In 1992 the False Memory Syndrome Foundation was founded in Philadelphia and soon had a membership of 18 000 families (Brahams, 2000:79). The British False Memory Society was established in 1993 and soon had a membership of 900 families. The ferocity of the debate has been subsiding since then, largely because many US insurance companies have refused to fund repressed-memory therapy and many US medical institutions prohibit such techniques on their premises. Consequently, Brahams (2000) has pointed out, ‘the therapy loses its status and the claims are killed at cause’ (p. 80). Wells et al. (1999) concluded their discussion of the credibility of recovered memories by expressing the view that, ‘it might be wise to inform clients about the possibility that they were not abused, and about the possibility that they could develop illusory memories. Perhaps this caution helps people maintain separation between imagined events and events that they actually experienced’ (p. 80). Similarly, Ost (2006) has argued that, given the present state of knowledge about recovered memories of childhood abuse, utilising particular techniques to assist people to remember events from their past, distant or recent, should best be approached with the utmost caution (p. 282).

6 INTERVIEWING EYEWITNESSES EFFECTIVELY

Interviewing crime victims and witnesses is a crucial part of evidence-gathering in law-enforcement investigations. It is essential, therefore, that when various professionals interview witnesses, especially such vulnerable witnesses as children (see next chapter), the elderly and learning-disabled, they base their procedures on scientific knowledge of how human memory works in order to obtain the maximum accurate recall but without contaminating the recollection of the witness. A number of interview techniques have been developed to enhance eyewitness recall accuracy. The cognitive interview technique and forensic hypnosis are two such aids to recall that have attracted a lot of researchers’ attention. Before focusing on particular techniques, let us first consider ‘official guidance’ available on how to

interview witnesses. Of course, general guidance and particular interviewing techniques described in this and the next chapter as well as elsewhere should be used bearing in mind the particular category of eyewitness, such as vulnerable, intimidated, reluctant and hostile, for example, and their particular needs (see *Achieving Best Evidence in Criminal Proceedings*, Criminal Justice System, 2007, for excellent detailed guidance for a range of eyewitnesses).

Research⁶⁹ into video and audio recordings of police interviews in the early 1990s that had been encouraged by the *Police and Criminal Evidence Act* of 1984 (PACE) and provided support for investigative interviewing (see chapter 8) which was developed and incorporated into PEACE, a five-phase model of interviewing (Milne and Bull, 2003a). The mnemonic PEACE denotes: Planning and preparation, Engage and explain, Account, clarification and challenge, Closure and Evaluation (Milne and Bull, 2003a).

In England and Wales, the *Criminal Justice Act 1991* provided that interviews of children involved in cases of alleged abuse is the responsibility of social workers and police officers who must follow the guidance to be found in the *Memorandum of Good Practice* (MOGP) on video-recorded interviews with child witnesses for criminal proceedings (Home Office and Department of Health, 1992). The MOGP recommended that the length of interviews be no longer than 60 minutes. However, evaluation of the implementation of MOGP guidance by Davies et al., (2000) of interviews carried out by police officers with children aged 4–14 years in cases involving alleged sexual abuse found that: the interviews lasted from 20 to 90 minutes; less than 10 minutes was spent on average developing rapport, and while open-ended questions were more effective in the oldest children, specific questions were more effective (that is, produced more information) in the young children. Another evaluation of compliance with MOGP guidance by Sternberg et al. (2001) of 119 videotaped interviews involving children aged 4–13 years in alleged sexual abuse cases found that police officers made greater use of forced-choice than open-ended questions. The MOGP was subsequently incorporated in *Achieving Best Evidence in Crime Proceedings: Guidance for Vulnerable or Intimidated Witnesses* (ABE) (Home Office and Department of Health, 2001). A document similar to ABE was published by the Scottish Executive in 2003.⁷⁰ It provided a set of investigative protocols for use with children and other vulnerable witnesses. The 2007 revised version of ABE (paras 3.151–3.267) makes the following recommendation for interviewing vulnerable adult witnesses: Interviews with vulnerable persons should normally comprise the following four phases: establish rapport; seek the narrative recall; ask questions; and closure (para. 3.152). More specifically:

Phase 1: establishing rapport (including engaging and explaining)

First explain the formalities and establish rapport by, *inter alia*, helping the witness to relax and feel as comfortable as possible, briefly mentioning the reason for the interview in a way that does not refer directly to an alleged offence (for example, ‘Could we please talk about something you have already told your mummy about?’

or, ‘Something seems to have been making you sad, perhaps we can talk about it’). In explaining the ground rules, the interviewer should communicate the outline of the interview in a way that is appropriate to the abilities of the witness (para. 3.171), making it clear that the witness can ask for a break whenever he/she wants.

Phase 2: initiating and supporting a free narrative account

The interviewer should only ask very open-ended questions in this phase such as ‘Do you know why you are here today?’, ‘Is there more you can tell me?’, ‘Can you put it another way to help me understand better?’ (paras 3.180, 3.181). To avoid mere *compliance* by a witness, the interviewer should try not to appear too authoritative but, rather, competent and confident, thus reassuring the witness they can be relied upon (para. 3.184). To avoid acquiescence, the interviewer should do their utmost to avoid using ‘yes’ or ‘no’ questions, using, instead, ‘either/or’ type questions.

Phase 3: questioning

Before proceeding to ask the witness questions, it is a good idea for the interviewer to first let the witness know they will be asking them some questions in order to expand on and clarify what they have said so far (para. 3.194). The authors of ABE make it clear in para. 3.195 that in order to help vulnerable witnesses to answer their questions, interviewers should ensure their questions are:

- simple
- free of jargon
- free of abstract words and/or ideas
- not too directive or suggestive
- free of double negatives and, finally,
- every question contains only one point.

To facilitate the questioning phase, the interviewer could ask open-ended questions beginning with ‘Tell me’ or ‘Explain’. To encourage the witness to elaborate, the interviewer could ask an open-ended question such as, ‘You’ve already told me the person who touched you on the chest was a man. Please describe him to me’. Of course, if a witness appears distressed answering questions, the interviewer should move away from that topic for a while and then get back to it (para. 3.210). Specific-closed questions should be asked in a non-suggestive way (for example, ‘What colour was the man’s jacket?’ (para. 2.213) and, similarly, the interviewer should avoid asking ‘why’ because the witness may take it to mean that he/she is being blamed for something (para. 2.214).

Phase 4: closing the interview

The interviewer should always aim to end the interview appropriately by thanking the witness, asking them if they have anything else they wish to add and ensuring that the witness leaves the interview in a positive frame of mind (paras 3.237–3.243).

Following the conclusion of the interview, the interview team should evaluate: (a) the information obtained in the interview, and (b) the performance of the interviewer (paras 3.244–3.246). Finally, if the interview team is of the view that a vulnerable witness requires therapeutic help before the criminal trial, the witness should be given a free choice. (For guidance in such cases, see *Provision of Therapy for Vulnerable or Intimidated Witnesses Prior to Criminal Trial: Practical Guidance* [Crown Prosecution Service and the Department of Health with the Home Officer, 2001]).

Using Neuro-Linguistic Programming To Build Rapport

Neuro-linguistic programming (O'Connor and Seymour, 1990) is being used by the FBI to train its special agents in developing skills for building rapport with eyewitnesses with traumatic experiences (Sandoval and Adams, 2001). The basic idea is that the interviewer develops a personal bond with the interviewee that is conducive to trust. This, in turn, encourages the witness to provide information. The personal bond is achieved by the interviewer leaning forward, being attentive and subtly and continuously matching the following characteristics of the witness: (a) language (that is, use of similar visual, auditory or kinesthetic phrases); (b) kinesics (non-verbal behaviour/body language, that is, gestures, posture, movement of the hands, arms, feet and legs); and, finally, (c) paralanguage (choice of words, how something is said, the speech rate, volume and pitch of speech). The aim is for the witness to feel the interviewer is genuinely interested in him/her as an individual, thus increasing rapport and enhancing communication, resulting in the witness providing crucial information about the crime in question (Sandoval and Adams, 2001:5).

Cognitive Interview (CI)

Until recently a police officer was expected to learn interviewing skills 'on the job'. It is also known that police spend a large part of their time talking to people and that frequently witnesses do not provide police with all the information they require for an investigation (Köhnken et al., 1999). Through sheer experience, police investigators come to appreciate the usefulness of reinstating the context of a crime when interviewing eyewitnesses. The practice is supported not only by research into the components of the cognitive interview technique but also by research into a very common need of police, especially in investigating hit-and-run traffic accidents, namely, witnesses' recalling licence plates (Emmett et al., 2006). The availability, therefore, of an effective technique for interviewing witnesses can only assist police and other investigators. Such a procedure now exists; it is known as the cognitive interview (CI) technique and has been adopted by police forces on both sides of the Atlantic, on continental Europe and in Australia, as well as by other professionals (for example, social workers) whose work involves interviewing people, including children.

By now there is research evidence regarding the success of the CI in assisting police investigators to catch criminals. Fisher et al. (1989) reported that detectives elicited 48 per cent more correct information from actual victims of crime after being trained in the CI technique. Milne and Shaw (1999) found that the CI helped detectives in the United States to elicit detailed information pertaining to sightings of a missing girl aged seven years old and it was used successfully in the police investigation of the bombing incident in Bournemouth, England, in 1993.

The CI has been largely the work of American psychology professors Fisher and Geiselman (see Fisher and Geiselman, 1992; Geiselman et al., 1984). They have utilised four principles derived from the empirical literature on information retrieval⁷¹ which increase recall accuracy without increasing the amount of inaccurate information remembered. According to Geiselman et al. (1984), the four principles (mnemonic aids) are: (a) reinstate the context,⁷² that is, the conditions under which the event in question was encoded; (b) report everything, however trivial it may seem; (c) recount the event in different orders; and (d) recount the event from different perspectives. Researchers have found that: (a) each of the four components are equally effective in improving accurate recall of information (Milne and Bull, 2002); (b) a combination of the CI mnemonics produces better recall compared to any of the mnemonics used on their own (Memon and Stevenage, 1996); and, finally, (c) the context reinstatement is perhaps the most powerful component of the CI (Milne and Bull, 2002).

Geiselman et al. (1984) compared the CI with the hypnotic interview along the lines suggested by Orne et al. (1984) and a 'standard police interview' in a study in which student subjects saw a video showing an armed robbery. The hypnotic interview and the CI were found to yield 35 per cent more accurate information than did the standard police interview, without an increase in inaccurate and fabricated information. The CI has also been shown to significantly reduce the impact of misleading questions on witness accuracy (Geiselman et al., 1986). In the light of studies with serving police officers, the original CI was revised by Fisher et al. (1987). The enhanced CI was developed to overcome such difficulties as anxious and inarticulate witnesses and poor interviewing strategies used by interviewing police officers (George, 1991). The enhanced CI incorporates techniques like rapport building, transferring control of the interview to the interviewee, appropriate use of pauses and non-verbal behaviour. The revised version places less importance on asking the witness to recall, using different perspectives and in different order and stresses the importance of repeated recall and listening skills. Fisher et al. (1987) found the revised version produced significantly more (45 per cent) accurate information in police detectives' interviews of crime witnesses without increasing inaccurate recall. Subsequent laboratory and field studies with both children and adult eyewitnesses reported findings in support of the CI as a superior interview technique with crime witnesses (Fisher and Geiselman, 1992; Memon and Bull, 1991). Researchers have demonstrated the usefulness of the CI in a developing country, namely, Brazil (Stein and Memon, 2006) and across age-groups (Wright

and Holliday, 2006). British researchers Clifford and George (1995) reported a field study with 28 experienced policemen and policewomen interviewing real-crime victims/witnesses that compared three methods of investigative interviewing: CI, conversation management (CM) and a combination of both. Their findings provide strong support regarding the ecological validity of the CI as a superior investigative interviewing technique. Findings supporting police use of the CI were also reported by Kebbell et al. (1999), who established that a serious problem was that many police officers in the UK do not have the time to conduct a full cognitive interview.

Köhnken et al. (1999) reported a meta-analysis of the CI literature since 1984, a total of 55 experimental comparisons of the CI and the standard interview from 42 empirical reports, both published and unpublished, representing 2447 interviewees. They concluded that the CI 'generates substantially more correct details compared to a structured (or unstructured) interview . . . Moreover, no experiment has been reported yet where a cognitive interview has resulted in fewer correct details compared to a standard interview' (p. 20). Köhnken et al. found that the memory-enhancing effect of the CI on the recall of correct details is even greater in the more ecologically valid studies. The CI has been shown to compare favourably with other interview procedures (see also Memon and Higham, 1999, for a literature review) such as the standard police interview, the guided-memory interview (Malpass and Devine, 1981), the structured interview (Memon et al., 1997) and hypnosis (Geiselman et al., 1995). Granhag and Spjut (2001) compared the structured interview, the standard interview and the enhanced cognitive interview with 32 children as subjects aged 9–10 years who watched a 15-minute performance by a professional fakir. They found children recalled more correct information (and no more incorrect information) with the enhanced cognitive interview than with any of the other techniques.

Regarding the usefulness of the CI as far as the misinformation effect is concerned, Centofanti and Reece (2006) in Melbourne, Australia, have examined the effect of the CI on misleading post-event information and found it produced significantly more correct pieces of information than the structured interview, without an increase in errors or confabulation. They concluded that their findings lend support to a trace-alteration explanation for the misinformation effect but does not exclude other possible mechanisms (p. 681). Regarding the question of whether the CI is able to reduce the misinformation effect, Geiselman et al. (1986) and Milne and Bull (2003) found that it does but only if used before the presentation of misleading information. However, other researchers (Holliday, 2003; Holliday and Albon, 2004) have reported mixed findings regarding the impact of the CI on the misinformation effect. As far as interviewing vulnerable witnesses is concerned, Milne and Bull (1995) and Milne et al. (1999) reported a study that compared 47 adults with mild learning intellectual disabilities attending day-centres and 38 adults from the general population. The subjects were shown a video-recording of an accident and were interviewed a day later using the CI or the structured

interview. It was found that for both groups of subjects the CI was more effective than the structured interview in enhancing witnesses' recall. However, with the learning disabilities group the CI also produced a disproportionate increase in the reporting of person confabulation. The authors of *Achieving Best Evidence in Criminal Proceedings* (Criminal Justice System, 2007, at 3.254) warn their readers that, unless interviewers who try to use the CI with vulnerable witnesses have had appropriate training, they risk using the technique ineffectively and confusing such witnesses. It should also be noted in this context that, as Memon et al. (2003:101) point out, more research is needed with vulnerable witnesses as eyewitnesses, utilising existing knowledge in social psychology about vulnerable vs 'normal' people pertaining, for example, to the acquiescence tendency (that is, 'yea-saying') and facial expression and personal space (see Home Office, 2002). There is also an urgent need for ecologically valid research into the role of interviewees (in terms of their social background) in investigative interviews, especially with vulnerable witnesses, including children (see chapter 4).

The cognitive interview is a very good example of the application of psychological theory from the laboratory to the field.

A number of ecologically valid studies have failed to find support for the CI as a superior interviewing technique and point to difficulties in training experienced police investigators to use the technique (Memon et al., 1995). Some researchers have also failed to find evidence that all four techniques used in the CI increase witness accuracy significantly. Boon and Noon (1994) reported that the changing perspectives mnemonic did not facilitate recall of accurate information by student subjects. Finally, Milne et al. (1995) examined the degree to which the CI helps children to resist the impact of misleading questions. It was found that whilst the CI enhanced children's recall of person and action details, it increased their person errors and confabulations; children were significantly more likely to resist script-inconsistent than script-consistent misleading questions and, finally, the CI enhanced children's resistance to misleading questions only when the questions were presented after the CI. The CI is a very good example of the transfer of psychological theory from the laboratory to the field. However, despite the fact the CI is routinely taught to police officers in Britain, for example, many of the officers are reluctant to apply the CI, especially to interview traumatised victims.⁷³ Shepherd et al. (1999) has advocated the use of spaced cognitive interview (SCI) which, they argue on the basis of case studies, has therapeutic effects on traumatised victim-witnesses. The SCI 'combines standard prolonged exposure procedures with explicit memory retrieval techniques of context-reinstatement, focused and extensive retrieval, especially reverse order recall. Since it aimed at maximising the individual's experience, he or she is not asked to report the events from another standpoint or perspective' (Shepherd et al., 1999:130).

The available literature shows that the CI is without doubt a very useful interviewing technique with eyewitnesses. Its demonstrated merits far outweigh its limitations and it is, therefore, recommended for adoption by law-enforcement investigators and other categories of investigators whose work includes interviewing

witnesses. The need for additional ecologically valid studies to maximise the effectiveness of the CI becomes more important when we remember the lack of usefulness of such aids to recall (such as the *Identi-Kit*, *E-Fit*, and *FACE*), all of which have been found to be of limited use in apprehending offenders (Clifford and Davies, 1989; Davies, 1983; Kapardis 1994). Finally, as far as mock-jurors' perceptions of the CI are concerned, Fisher et al. (1999) had 91 college subjects listen to cognitive interviews and standard police interviews of 7-year-old children who were attempting to describe an earlier session of playing the game of 'Simon Says'. While no relationship was found between the type of interview used and perceived credibility of the witness, the CI interviewer was judged to be less manipulative than the standard police interviewer.

Forensic Hypnosis

Haward (1990) defined forensic hypnosis as 'Hypnotic techniques applied to information-gathering for evidential purposes' (p. 60). Reiser (1989) is a strong advocate of the view that hypnosis could be used to enhance witness memory accuracy. Orne (1979), however, sees hypnotic techniques to be most appropriately utilised in the investigative context. Hypnosis itself, of course, has a long and impressive history as a therapeutic tool in psychiatry and clinical psychology. In the early days of hypnosis in the first half of the nineteenth century the law's interest was in controlling its use, but since the second half of the nineteenth century the law's interest has been in the field of forensic hypnosis (Evans, 1994). Hypnosis is commonly used by clinical psychologists. Poole et al. (1995) reported that 25 per cent of qualified clinical psychologists in the UK and the United States routinely use hypnosis as part of their treatment programs. In the first decade of the new millennium, an unsatisfactory state of affairs still characterises the relationship between hypnosis and the law.

Hypnosis interviews by police to assist witnesses to remember were first used in the United States in the early 1950s and by 1975 experienced detectives were being trained in hypnosis. Within one year trained Los Angeles detectives handled 70 major crime cases and the practice spread to other police departments (Reiser, 1989). In the UK⁷⁴ and in Australia⁷⁵ hypnosis is usually conducted by psychiatrists and qualified psychologists and, in stark contrast to the United States, never by police officers. In compliance with the Home Office Regulation 66/1988, it is in the most exceptional of crimes that British authorities would resort to the use of hypnosis, and hypnosis cannot be used on a murder suspect to obtain a confession (Berry et al., 1999). A number of concerns have been expressed by researchers and some of those can be found in court rulings (Freckelton and Selby, 2005:160).

Reiser (1989:151) describes a few cases to illustrate the usefulness of investigative hypnosis. In one such case in California, a 15-year-old female hitch-hiker accepted a lift from a man driving a van. The driver tied her up, raped her, cut off her forearms with an axe and forced her into a highway drainage tunnel. When

he left, the victim managed to crawl out, stopped a passing car and was taken to hospital. Because of her extremely traumatic experience her memory of the suspect and of the events was rather limited. When interviewed under hypnosis, however, she was able to recall the suspect's name, his occupation, described the van and helped a police artist construct a composite drawing of the suspect. The offender was arrested and convicted.

Haward (1981:110) points out a number of constraints on the use of hypnosis: admissibility of hypnotic evidence and the reimposition of amnesia; not all victims are willing to be hypnotised; some people are poor hypnotic subjects; age-regression requires considerable time; parents may not consent to their children (especially if female), who have been victims of crime, being hypnotised and, finally, hypnosis is powerless to obtain recall if the memory of a particular fact simply no longer exists. In addition, individuals can and do lie under hypnosis (Virgo, 1995) and some individuals are able to simulate an hypnotic trance (Wagstaff, 1993). Sheehan (1994:66–7) has also drawn attention to another major issue in forensic hypnosis, namely, the civil rights of the person who is hypnotised, especially when the individual is under suspicion of a crime. One concern is, for example, that such a person may report incriminating evidence under hypnosis that comes to the attention of the police (p. 67). On the question of whether hypnosis could interfere with a witness' memory of an event, Gudjonsson (1992a:170) points out three risks: witness' vulnerability to confabulation, to suggestibility and to overconfidence. Gudjonsson adds, however, that the experimental evidence on confabulation, susceptibility to leading questions and overconfidence as a result of hypnosis is not unequivocal (p. 171). On the basis of his discussion of relevant studies, Ost (2006) concluded that while false memories may not be created by hypnosis itself, its use (or the use of such pseudohypnotic procedures as relaxation or guided imagery) with people who are trying to recall traumatic events earlier in their life 'may be extremely problematic' (p. 73).

Regarding the extent to which the hypnosis interview increases the accuracy of witness recall, McConkey (1995) concluded his assessment of the laboratory evidence on hypnotic hypermnesia and hypnotic pseudomemory stating that, while there is no guarantee in the forensic context, hypnosis will result in greater witness accuracy, there is the risk of inaccurate recall and unjustified confidence (p. 2). Taking hypnotised subjects back to the scene of the crime and methodically questioning them about various aspects of the event may indeed help some witnesses to remember more details. This is not surprising because the technique involved is similar to the CI technique. However, when there is no external corroborative evidence there is the difficulty of not knowing in such a situation what is accurate and what is not (Haward, 1981b). It is, therefore, not possible to decide whether forensic hypnosis solves more problems than it creates. It is, of course, necessary that the hypnosis be carried out by a properly qualified professional such as a psychiatrist, a psychologist or medical practitioner who is trained in witness interviewing techniques and

who is not involved in the case, preferably with the whole session being videotaped continuously.

Despite its popularity among police investigators, especially in the United States, the use of forensic hypnosis has had a mixed treatment in psychology (see McConkey, 1995). Some authors (for example, Haward, 1981b) have attacked the practice of training police investigators on a brief course to use hypnosis. Two of the concerns expressed in this context include protection of the mental health of the witness, and the possibility of inadvertently planting items of information, pseudomemories, which become part of what a hypnotised witness will remember later (Haward, 1981b). Lloyd-Bostock (1988) concluded that: 'Hypnosis is not . . . the wonder tool it has been held to be. There is no video-recording faithfully stored in the brain awaiting to be uncovered and played back at the convenience of the forensic hypnotist: the appearance of full and clear recall under hypnosis can be spurious despite the best intentions of witnesses and hypnotist' (p. 19).

Kebbell and Wagstaff (1998) pointed out that while for some authors hypnotic techniques may have the potential to enhance eyewitness testimony in police investigations into criminal offences, experimental research shows that hypnosis is associated with decreases in accuracy, false confidence in incorrect information, increased suggestibility to leading questions and, finally misleading post-event information – factors that limit the usefulness of hypnosis as a witness interviewing technique.

In view of strong arguments against the admissibility of hypnotically enhanced testimony, one could argue that it should not be allowed to be used as a method for 'creating' an eyewitness whose memory has been reconstructed by hypnosis and, furthermore, that such a witness should not be allowed to testify to this new memory in the court. It is possible, of course, for one to agree to hypnosis being used selectively and under safeguards to assist during the investigation process but not to its being admitted as evidence by the courts.

Since the mid-1980s, many law-enforcement officers have embraced hypnosis as a panacea for the frailties of human memory, a tool that would greatly assist them to clear up more serious crime. However, the enthusiasm by law-enforcement agencies, some forensic psychologists and the public at large about forensic hypnosis seems to be unwarranted in the light of both the experience with crime detection and hard facts from psycholegal research.

On the basis of the existing literature it can be safely stated in conclusion that: 'Properly controlled hypnosis may be very useful in appropriate cases [with witness victims in cases where memory recall is inhibited by emotional trauma], but indiscriminate use and a false impression of its power can do a great deal of harm' (Lloyd-Bostock, 1988:21). Evidence obtained by forensic hypnosis should, therefore, be viewed with a great deal of caution. Finally, forensic hypnosis should only be allowed to be used under strict guidelines (including the video-taping of such

Evidence obtained by forensic hypnosis should be viewed with caution and it should only be allowed to be used under strict guidelines.

hypnotic interviews), like those provided in the Californian legislation regulating the admissibility of post-hypnotic evidence and approved in New Zealand in *R v. Felin* [1985] 2NZLR 750 at 753 (Freckelton, 1996).

CONCLUSIONS

At best, what can be confidently stated is that psychologists have identified a number of important correlates of eyewitness identification inaccuracy to do with the witness, the perpetrator, and how witnesses are interviewed by law-enforcement personnel. Admittedly, the empirical evidence is more convincing for some variables than for others. Unfortunately, psychologists have not yet tackled the question of how different crimes or different aspects of a crime are remembered by different eyewitnesses, and very little research has been reported on how, for example, disguises worn by armed robbers affect witness accuracy, as was suggested by Clifford (1981). Research, especially of a non-laboratory nature, is badly needed to examine whether and how different variables that have been identified as important indicators of witness identification accuracy interact to impact on eyewitnesses.

The psychological literature discussed permits the following conclusions.

- 1 A range of witness characteristics, namely, personality, cognitive style, age, gender, race, stereotypes, whether the witness is also a victim of the crime and the number of witnesses have been shown to be important indicators for psychologists who testify as experts in the courtroom.
- 2 Contrary to popular belief, many laboratory studies report no significant relationship between witness-confidence and accuracy and a number of explanations have been offered for this finding. However, the ecological validity of such experimental simulation studies has been strongly criticised to the extent that some authors have argued that the no-relationship finding may well be an artefact of the lack of external validity of laboratory studies using students as subjects. What is needed for definitive conclusions to be drawn about the relationship between witness confidence and accuracy is research with forensically relevant real-life eyewitnesses to test hypotheses generated by laboratory studies.
- 3 Factors relating to the perpetrator have been neglected by psycholegal researchers. What limited evidence there is indicates that physical attractiveness, gender, body size and height are related to how an eyewitness will perceive and remember a crime suspect.
- 4 The police would do well to remember that the length of the delay between the commission of an offence and when they interview eyewitnesses impacts on witnesses' accuracy, as does the number of efforts made to recall. Also, being a police officer does not confer superior perceptual or memory capabilities but comes with a 'mental' set to selectively perceive and interpret an event as to even impute and remember 'criminal' details that, in fact, never existed. The practice

of permitting one police officer to represent a group of police eyewitnesses is a dubious one. When they ask witnesses leading, suggestive questions, police may well construct the answers they will get. The police also need to take note of evidence from studies of actual police interviews of witnesses where they use directive questioning, a significant part of which is often characterised by inappropriate, counter-productive questioning, such interviews treating witnesses worse than criminal suspects (McLean, 1995).

- 5 As far as the whole debate about recovered memories of childhood sexual abuse is concerned, therapists, like the police, need to be sensitive to, and guard against, the potential problem that is endemic in suggestive questioning.
- 6 The effectiveness of the CI technique in enhancing the accuracy of eyewitness recall provides further support for the view that experimental psychologists have a great deal to contribute to law enforcement in general and crime suspect identification in particular.
- 7 While not denying that forensic hypnosis can be crucial in obtaining crucial evidence from eyewitnesses in appropriate cases, in view of the fact that hypnosis has been shown to have a number of limitations its use needs to be strictly regulated by statute.
- 8 A major challenge for psycholegal researchers is to determine whether and how particular combinations of event, witness, perpetrator and interrogational factors impact on the accuracy of identification accuracy.
- 9 Finally, psycholegal researchers have provided us with: (a) a good insight into which factors may impact on the accuracy of eyewitness testimony; (b) suggestions on how best to minimise various sources of error; and (c) input into guidelines for professionals on how best to interview witnesses in general and vulnerable witnesses in particular.

The psychological knowledge presented should also serve to dispel myths adhered to by the legal profession, law-enforcement personnel and the public alike that human perception and memory behave like a video-recorder. Notwithstanding the fact that the work of psychologists contributes to reducing the risk of false identifications which, as Wells (1993:568) pointed out, cause double injustice because they penalise the innocent, their friends and relatives but also mean the real culprit remains free, the same knowledge should also help to remind psychological researchers that not all eyewitness evidence is unreliable.

Well-known legal psychologists in the United States, UK and in Australia have advised as expert witnesses in cases involving witness testimony. The Dutch psychologist Willem Wagenaar has also testified as expert at various International War Crime Tribunals (Wagenaar, 2008). As shown later in this book (see chapter 7), the courts in the United States, the UK, Canada, Australia and New Zealand have broadened the scope for the evidence of psychologists as experts on eyewitness testimony. The question of whether psychologists are justified in testifying as experts in courts of law is discussed in chapter 7. It is sufficient here to emphasise

that the very best psychologists can do is draw the attention of magistrates, judges and jurors to the kinds of factors that contribute to the unreliability of eyewitness identification accuracy. Understandably, some expert witnesses may find this conclusion rather difficult to accept but the empirical evidence presented in this chapter does not justify their doing more than sound general warnings. Also, psychologists would do well to remember that, while different category variables are important in eyewitness evidence (Cutler et al., 1987), defence lawyers are more likely to accept findings pertaining to system variables.

On the basis of the empirical evidence on mistaken identification and a small number of known miscarriages of justice due to such misidentification, Davies (1996:232–41) proposed reconsidering Lord Devlin's (1976) recommendation that a positive identification should stop being the primary or principal premise on which someone can be prosecuted. Also, Davies argued for the adoption in England and Wales of the Scottish legal position whereby all identifications must be independently corroborated. Davies' suggestion warrants serious consideration by the legal fraternity, researchers and the public alike. Finally, as far as the admissibility of expert evidence about repressed memory syndrome is concerned (see chapter 7), Freckelton and Selby (2005) state that it 'remains to be authoritatively determined throughout common law jurisdictions' (p. 423).

REVISION QUESTIONS

- 1 Which personality attributes are important in eyewitness accuracy?
- 2 What do we know about elderly people as eyewitnesses?
- 3 What is the relationship between eyewitness confidence and accuracy? What factors influence it?
- 4 What do we know about police officers as eyewitnesses?
- 5 How accurate are eyewitnesses as far as a perpetrator's non-facial characteristics are concerned?
- 6 What explanations have been put forward for post-event misinformation?
- 7 What are two contrasting schools of thought concerning the controversy about recovered memories of child sexual abuse?
- 8 How useful is the cognitive interview in enhancing the accuracy of eyewitness testimony?
- 9 What are some of the dangers in using forensic hypnosis? How can one guard against them?

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4 CHILDREN AS WITNESSES

CHAPTER OUTLINE

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Beginning in the 1980s, a number of legal and sociopolitical movements thrust children onto the center stage of the legal arena, fostering unprecedented interest in their ability to recall autobiographical events.

(Dickinson, Poole and Laimon, 2005:151).

Child victim witnesses, when being cross-examined in adult criminal court, are subjected to a range of punitive linguistic strategies. The meaning and essence of their own experiences are systematically denied. Credibility is reduced and all problems are made, as in soap operas, personal rather than systemic or social.

(Brennan, 1995:71)

Children have a right to justice and their evidence is essential if society is to protect their interests and deal effectively with those who would harm them.

(Jack and Yeo, 1992)

The demonstrable fact that investigative interviews with young children can be rendered worthless by inept practice should not blind us to the substantial literature demonstrating that reliable information can be elicited from young children who are competently interviewed, however.

(Lamb et al., 1995:446)

INTRODUCTION

Since the early 1980s increasingly more children testify in court in criminal and civil cases as victims and witnesses and a number of widely-publicised cases of alleged child abuse in the UK (for example, Cleveland,¹ Broxsove in Nottingham²) and in the US (for example, *Kelly Michaels* and the *McMartin* cases) where the investigation miscarried, have highlighted limitations of a variety of professionals tasked with interviewing child witnesses and the agencies involved in investigating, prosecuting such cases and responding to child witnesses' needs. Such cases have contributed to the impetus for the provision of adequate legislation and official guidance on how to best interview children and other vulnerable witnesses and to assist them in testifying in court to the best of their ability. Psycholegal research into children as witnesses has a history going back to the beginning of the twentieth century (Binet, 1900). Since the 1970s there has been an increasing interest in western countries in victims of crime, especially sexual abuse. Irrespective of whether official criminal statistics and national victimisation surveys show that child sexual abuse has been increasing (for example, Sedlak and Broadhurst, 1996) or decreasing³ the last few years, the fact of the matter is that worldwide children are at an increased risk for crime victimisation, the impact of such victimisation on children can be catastrophic and violence and sexual abuse of children perpetuates the inter-generational cycle of violence and abuse in society. Sexual and violent crimes against children are very difficult to investigate and prosecute successfully because often the only evidence available is that of the victim and the alleged offender. False allegations of sexual abuse by children undoubtedly occur,⁴ can destroy an adult's life and feature more in divorce and custody disputes⁵ but, contrary to popular belief, their frequency is relatively low.⁶ To illustrate, McIntosh and Prinz (1993) in the United States found that a survey of 603 family court files pertaining to divorces involving children revealed that in only 2 per cent of cases in which custody or access was contested were sexual abuse allegations made.

The child's testimony is undoubtedly of crucial importance in, *inter alia*, a prosecutor deciding whether there is sufficient *prima facie* evidence to take a case to court. In most cases, a physically or sexually abused child has been frightened by his/her abuser into not speaking to 'others' about what he/she has been through and, also, is shy or embarrassed to answer questions about the abuse in an interview. There is now a voluminous literature on children's testimony (see Westcott et al., 2002). A great deal of research has now been done into the accuracy of young

children's memories and how reports of sexual abuse can be interfered with by the interviewer. However, limited research has been undertaken into real victims of child sexual abuse being cross-examined in criminal courts (see Brennan, 1995). The focus on and the concern with child victims and child witnesses since the 1980s by the media and researchers alike has been instrumental in the legislatures in various countries responding to demands that the law of evidence and procedure become more sensitive to the needs of victims in general and female and child victims in particular.⁷ However, despite all the attention paid by a broad range of professionals to the topic of the child witness and the enactment in many countries of mandatory reporting laws for child abuse, there is a noticeable lack of adequate training for child protection services workers (Doris et al., 1995), especially in non-western societies.

We know a great deal about child witnesses and significant progress has been made in the law's treatment of them in western common law countries, but a lot remains to be done.

The empirical evidence discussed in this chapter leads to the inescapable conclusion that children as young as 3–4 years old can provide us with reports about an alleged incident that are of significant potential forensic usefulness but, like adults, the child's performance is also influenced by situational demands. We know a great deal about child witnesses and significant progress has been made in the law's treatment of child witnesses in western common and civil law countries, but a lot remains to be done.

1 LEGAL ASPECTS OF CHILDREN AS WITNESSES

Police Standing Orders and statutory provisions in various jurisdictions⁸ require that where a child is questioned, a parent, guardian, relative or, in special circumstances, a responsible adult be present except where it is impracticable or for other sufficient reasons. Not surprisingly, too, the courts have routinely scrutinised confessional evidence of young persons with particular care.⁹ Traditionally, the law in the UK,¹⁰ the United States¹¹ and Australia¹² 'has taken a very restrictive use of child witnesses, regarding them as inherently unreliable. 'When children have been permitted to testify they have done so on adults' terms' (Naylor, 1989:82). These suspicions about the reliability of child witnesses are seen in the competency requirement and the requirement for corroboration still in existence in various jurisdictions worldwide. In fact, it would not be an exaggeration to say that until recently 'children were treated as second-class citizens in the eyes of the law' and, not surprisingly, only a small proportion of offenders who have sexually abused children have been successfully prosecuted (Davies, 1991:178–9). However, as Clifford (2002:334) points out, as a result of the research into witness testimony and the socio-political drive to get children's voices heard in court, a paradox has evolved between adult witnesses being challenged (whereas the law has traditionally considered them reliable) and child witnesses' status in the court being strengthened (whereas historically the law considered them unreliable). Many jurisdictions still make use of competency examinations for children under the age

of 14. In such examinations, a child's competency will be decided following a *voir dire*.

The criteria for deciding whether a person is not competent to give evidence in criminal proceedings in England and Wales are stated in s.3 of the *Youth, Justice and Criminal Evidence Act* (YJCEA) of 1999. According to McEwan (2003:211), there is no age limit for child witnesses in England and Wales and, if a judge rules that a 4- or 5-year-old child is a competent witness, the Court of Appeal will not interfere (see *DPP v. M* [1997] 2 All E.R. 749). Regarding the question of whether a child is capable of giving 'intelligible evidence', expert evidence may be given in some jurisdictions but not in others. According to Freckelton and Selby (2005:125), in Queensland, Australia, s.9A of the *Evidence Act 1977* provides for such evidence in the case of children under 12 years of age whereas in the case of *G. v. DPP* [1997] 2 ALL ER 755 at 759 it was held that a judge or magistrate has no need of expert evidence to be adduced on the question of whether a child is capable of giving intelligible evidence.¹³

Drawing on Tapper (2004), in England and Wales children are considered *prima facie* competent to give evidence in criminal proceedings (s.53(11) YJCEA 1999) unless, as with any other person, it appears to the court in the course of ordinary discourse with them,¹⁴ that they are not able to: (a) understand questions put to them; and (b) to give comprehensible answers (s.53(3)). Thus, children are presumed to be able to perform both feats; it is for the party calling the child witness to satisfy the court on the balance of probabilities that the child is competent to give evidence in the proceedings (s.54); the court may receive expert evidence on the question of competence (s.54(5)); and the issue of witness competence is resolved in the absence of the jury (s.54(4)). Witnesses under the age of 14 years do not give sworn evidence. In considering the concept of 'competent witness', it should be remembered that by operating a strict test of competency in effect the law makes it most unlikely that abusers of rather young children can be successfully prosecuted (McEwan, 2003:210). Furthermore, testifying in court is a daunting experience especially for children, those under 11 years of age who have significant gaps in their knowledge of court (Saywitz, 2002) and even older children (aged 12–15 years) who are confused about the meaning of such crucial concepts as 'cross-examination', 'jury' and 'defendant' (Crawford and Bull, 2006).

The field of children's evidence has been in turmoil since about the early 1980s. This is seen, for example, in the plethora of publications in the UK,¹⁵ the United States,¹⁶ Australia,¹⁷ New Zealand¹⁸ and Germany.¹⁹ The turmoil has also been reflected in a number of legal reforms largely intended to relax the rules pertaining to children's competency. Examples of such reforms are amendments to the *Criminal Code of Canada Evidence Act* to allow children under 14 years to provide either sworn or unsworn testimony (Ruck, 1996). In the United States, various grounds of witness incompetence, including age, have been eliminated by Rule 601 of the *Federal Rules of Evidence*, the consequence of which

Legal rules concerning children's competency as eyewitnesses in western common law countries have been relaxed in recent years.

is that child witnesses are treated by the courts like witnesses generally as far as competency is concerned. In other words, the basic test is: Does the witness understand the difference between lying and telling the truth in court and does the witness, whether on oath or in affirmation, also understand the duty of telling the truth? Similar reforms to children's testimony requirements have included the abolition of the corroboration requirement in New South Wales, Australia, in 1985; the abolition in the *Criminal Justice Act 1988* in England and Wales of the rule that there could be no conviction on the unsworn evidence of children, and the *Criminal Justice Act* of 1991 which allows for a video-recorded interview with a child witness to be shown in court as the child's evidence-in-chief.²⁰ A court in England and Wales, however, has the power not to show part or all of a video-recording if the interview has not been carried out in compliance with relevant legislation. The YJCEA 1999,²¹ in an attempt to assist vulnerable and intimidated witnesses, included for certain categories of witnesses the pre-trial videotaping of cross-examination and the use of intermediaries. Leading the way as far as evidence law reform in common law countries is concerned, the YJCEA introduced two new 'special measures' for child witnesses, namely testimony with the assistance of an intermediary (s.29) and videotaped pre-trial cross-examination (s.28). Unfortunately, those two special measures have not yet been implemented (Hoyano, 2007:850). Other important reforms were introduced in England and Wales prior to 1999: the use of video interviews as examination-in-chief by the *Criminal Justice Act 1988*, s.32A(3); live video-link for cross-examination at trial (*Criminal Justice Act 1988*, s.32(1)); the use of screens,²² communication aids,²³ clearing the public gallery for a child's testimony in sexual abuse cases²⁴ and removal of wigs and gown.²⁵ Unfortunately, the YJCEA 1999 excluded child defendants from special measures. In the first suitable case before it,²⁶ the House of Lords advised trial judges to use their inherent jurisdiction to make special measures available to child defendants.

According to Hoyano (2007:849–50), the only two special measures for child witnesses in the magistrates' courts at the end of 2007 were screens, evidence by live-link and evidence given in private, while video interviews are admissible as evidence-in-chief for child witnesses 'in need of special protection' who testify in cases of alleged sexual or violence offences, abduction or neglect.²⁷ Strictly speaking, however, evaluation of the implementation of the special measures²⁸ by Hamlyn et al. (2004), Cooper and Roberts (2005) and Burton et al. (2006) shows that 'they had not yet become embedded in the routine practice of the police and the Crown Prosecution Service in dealing with vulnerable witnesses' (Hoyano, 2007: 851).²⁹ Furthermore, special measures were not routinely considered in many criminal justice areas for witnesses under 17 years of age for whom they were compulsory (p. 851). In December 2004, the British government announced a review of child evidence focusing on: (a) whether the provision in s.28 of the YJCEA 1999 for videotaped pre-trial cross-examination should somehow be retained;

(b) an examination of the implementation of special measures for child witnesses; and, finally, (c) measures for vulnerable defendants. It should be noted in this context that, following an adverse ruling³⁰ by the European Court of Human Rights in *SC v. United Kingdom* [2004] E.C.H.R.[2005] F.C.R 347 (ECtHR), legislation was introduced in England and Wales permitting young defendants to use the video link.³¹ In June 2007 the Office of Criminal Justice Reform published the Review Group's *Improving the Criminal Trial Process for Young Witnesses: A Consultation Paper*. The government chose not to publish the review itself. Hoyano (2007) concludes her excellent review of the Consultation Paper stating that 'it is disappointing in its failure to tackle difficult issues with detailed proposals' (p. 865). Esam (2002) has gone so far as to argue that in view of a number of problems and gaps which remain within the system in England and Wales, in a real sense, there is no justice for young witnesses.

Despite the importance of children's own understanding of providing testimony in legal contexts, there has been very little research 'pertaining to those situations where the child may be motivated or influenced to withhold the truth' (Ruck, 1996:104). Furthermore, Brennan (1995:72) reminds us that by keeping their abuse secret, sexually abused children carry a burden of responsibility, often blaming themselves for conflict that occurs. In a study that examined the development of children's understanding of telling the truth in court, Ruck (1996) used short-story vignettes and found that younger children (aged 7–9) were more likely to perceive telling the truth when giving testimony in court as a way of avoiding punitive consequences, while older children (aged 11–13) were more concerned with upholding the laws and rules of society. More knowledge about why children decide to tell the truth in court could suggest ways of assessing children's reasoning and competence in both civil and criminal proceedings, especially since 'the *voir dire* (interview) is an imperfect metric of a child's understanding of telling the truth in court' (Ruck, 1996:115).

Inter alia, the 1988 English Criminal Justice Act abolished the mandatory caution from judges in dealing with children's evidence in their summing up and introduced the principle of the live video-link as a means by which children could simultaneously communicate with the courtroom without having to confront the accused (see Davies and Noon, 1991, 1993; Flin, 1992). According to Davies and Noon (1993:22), the 'Live Link', as it became known, is available to children under the age of 14 in cases involving violence and to those under 17 in cases involving sexual assault. In England and Wales the video-link has enabled a child to give evidence from a smaller room adjacent to the courtroom, in the company of a court-approved supporter. A child witness can see the particular person speaking to them and those in the court can see the child giving evidence. The same piece of legislation raised the age limit for the video-link from 14 to 17.³² Closed-circuit television is also available in most jurisdictions in Australia (Cashmore, 1991; Waight and Williams, 1995:46).³³ More specifically, as in England and Wales, in

New South Wales, Western Australia, Tasmania and the Australian Capital Territory, there is a rebuttable presumption that a child giving evidence in a sexual or serious assault case can use closed-circuit television (Australian Law Reform Commission and Human Rights and Equal Opportunity Commission, 1997, para. 14.103).

The introduction of closed-circuit television for child witnesses in a number of different jurisdictions has been done with the intention of avoiding a situation where the victim has to confront the defendant in court, as well as to save the child the traumatic experience of testifying in the formal and anxiety-provoking atmosphere of the courtroom (Goodman et al., 1992). As application must be made to the court for some means of separation, such as closed-circuit television, to ensure that a child does not meet a criminal defendant face-to-face in the courtroom, there is scope for psychologists to conduct psychological evaluations regarding the potential trauma a child may experience in confronting the accused in a criminal trial (see Howells et al., 1996; Small and Melton, 1994).

However, it was the United States that pioneered the use of closed-circuit television for child witnesses in criminal cases in 1983. The Supreme Court in *Maryland v. Craig* 497 US 836 (1990) upheld the use of one-way closed-circuit television procedure to question child witnesses. In a majority decision in that case it was held that the Sixth Amendment does not guarantee a defendant's absolute right to meet with the witnesses against him/her face-to-face except 'Where an important public policy is furthered and where the reliability of testimony is otherwise assured' (Small and Melton, 1994:229). The Supreme Court outlined three criteria that must be satisfied for the state to show 'necessity', a finding that is required to allow a child to testify via a video-link. According to Small and Melton (1994:228) by 1990, 37 states allowed the use of videotaped testimony of alleged sexually abused children, 27 states authorised the use of one-way television testimony in such cases, and 8 states permitted the use of a two-way video-link. It should be noted in this context, however, that despite a number of important legal reforms on both sides of the Atlantic in Australia, New Zealand and Canada (see O'Neil, 1992), even though technology can solve some of the difficulties confronting child witnesses in court, it is not a panacea because there remain the attitudes of the various professionals involved (Cashmore, 2002:214). Consequently, Spencer and Flin's (1990:38) assessment that, 'The most important class of legally incompetent witnesses that remains is little children' is, alas, still valid.

While a minority of children prefer facing the accused in court (Cashmore, 1992; Davies et al., 1995), and some have argued that children should have the choice of testifying on closed-circuit television or in open court, available evidence shows that what child witnesses testifying in court fear most is being watched by the accused (American Psychological Association, 1990; Flin et al., 1988). Edelstein et al. (2002) reviewed the research on children's reactions to the legal system and concluded that: 'forensic interviewing, court involvement generally, and/or its

anticipation specifically may be stressful experiences for children', which may continue as a source of upset for up to three years and possibly twelve to fourteen years later (p. 269). Despite such evidence, Montaya (1995) argued that shielding child witnesses: does not invariably produce 'better evidence'; it 'may impair a defendant's right to represent a defense' and, finally, recommends that 'the judge should personally interview child witnesses before determining the need for shielding' (pp. 366–7). Suggestions for reducing the impact of legal stressors on children involved in prosecutions have included: videotaping forensic interviews the first time they are conducted; alternatives to testifying in court (for example, closed-circuit television); and programs that provide children with knowledge of the legal system before they enter the courtroom (see Edelstein et al., 2002; Goodman et al., 1999). But how effective are such video-links in protecting child witnesses?

2 EVALUATIONS OF THE 'LIVE LINK'/CLOSED-CIRCUIT TELEVISION

Davies and Noon (1991, 1993) monitored the scheme during its first 23 months for the British Home Office, during which time they surveyed courtroom personnel (judges, prosecutors and barristers) as well as a smaller number of police officers and social workers. Observational data were collected from 100 trials involving 154 children (100 girls and 54 boys) testifying via the 'Live Link'. The performance of children in court was assessed using rating scales provided by Gail Goodman. The average age of the witnesses was 10 years and 1 month and the great majority (89 per cent) were alleged victims (96 per cent of sexual abuse) rather than bystanders. It was found that the majority of the courtroom personnel thought favourably of the link, 74 per cent of the children were rated as happy when testifying and most were rated as giving their evidence effectively. Davies and Noon (1993:24) concluded that their data 'present a consistent picture of the advantages accruing to children testifying via closed-circuit television and clearly justify the extension of the scheme currently under way'. The question of the scheme's effectiveness, however, needs to be answered against the knowledge that only 8 out of the 154 children studied had met their counsel prior to being examined on the link; children waited an average of 10 months for their case to come to trial; despite arriving at the start of court business, they had to wait an average of 2 hours 28 minutes before giving evidence and, finally, no measures were taken to ensure that a child could not come into contact with and be intimidated by the accused or their supporters³⁴ during recess in the corridors of the court or in the canteen (Davies and Noon, 1993:24–5). It can be seen that schemes such as the Live Link on their own can only provide a partial solution to the child witnesses' problem of having to confront the accused when they are testifying in court.

Child witnesses of sexual abuse who are protected from the presence of the accused during the trial are less stressed and provide more complete and accurate information. However, closed-circuit television provides a partial solution to the child witness' problem of having to testify in court in the presence of the defendant. The emotional repercussions of the trial for a child witness of sexual abuse are not resolved with the conclusion of the trial.

Wade (2002) reported a study of 40 children at one Crown Court Centre in England and Wales. All but one concerned sexual offences against children. The children comprised 26 children complainants and 14 bystander witnesses. Nineteen of the children were aged 7 to 12 years and 21 between 13 and 18 years. The researchers observed each trial and a detailed transcript was taken of the proceedings. Also, in-depth interview data were obtained for at least one child in all but one of the cases examined. It was found that some children felt they could not have testified if the link had not been available but 'the response of others was more equivocal' (p. 225). The bystander witnesses, who were all aged 13 years or above, were anxious while waiting to go into court but their anxiety diminished when they started answering questions. In contrast to bystander witnesses, children who were the complainants were distressed by the cross-examination. Wade found that 'the emotional repercussions of the trial were not resolved with the conclusion of the court case' (p. 228). Therefore, it is interesting to note that, despite the stress involved for many of the children in Wade's study in testifying against the accused, overall the children viewed the criminal justice process with respect (p. 229).

Evaluations of the effect of Live Link³⁵ on: (a) children witnesses in court proceedings have also been reported in the Australian Capital Territory³⁶ and Western Australia,³⁷ and also in Scotland;³⁸ and (b) there have also been experimental and court simulation studies³⁹ and court observation studies.⁴⁰ In support of earlier research, Cashmore's literature review concluded that a child witness protected from the accused's presence is less stressed and provides more complete and accurate information (p. 208). Videotaping a child's statement about the alleged offence means the child will be interviewed less, his/her trauma in testifying will be reduced and the accused may well decide to plead guilty when faced with such a videotape (Cashmore, 2002:210). Furthermore, a videotaped statement allows the fact-finder, perhaps months later, to see the child's age, and facial expression when making the statement to a police officer or social worker and so forth. Finally, such a videotape reduces the scope for the defence lawyer to undermine the child's credibility as a witness by blaming him/her for inconsistencies in his/her testimony before and during the trial (Milne and Shaw, 1999:133) or the interviewer for leading the child.

Videotaped interviews in England and Wales (which save a child aged under 14 years in the cases of physical violence or under 17 years in cases of sexual assault from giving their evidence-in-chief at trial) must be conducted by a police officer or social worker. Such interviews are governed by the document *Achieving Best Evidence in Criminal Proceedings: Guidance for Vulnerable and Intimidated Witnesses, Including Children* (Home Office, 2002); jointly issued by the Home Office and the Department of Health in 2007 (see below). An evaluation in the early 1990s of videotaped interviews with child witnesses for the British Home Office

by Davies et al. (1995) from Leicester University reported the following: of the 1199 trials (predominantly indecent assault cases) that took place in England and Wales during the 21-month period (October 1992 to June 1994 inclusive) involving children witnesses, 640 (53 per cent) included an application to show a videotaped interview, 73 per cent of those applications were granted and in 43 per cent of those cases the tape was in fact played in court – in other words, a tape-recorded interview was played in court in 17 per cent of the total number of trials during the period in question. It was also reported that judges were significantly more positive in their evaluation of videotaped interviews than were barristers, while 98 per cent of police officers and all social workers surveyed believed the main advantage was a significant reduction in stress for the child. Examination of 40 videotaped interviews, most of which had been conducted by female police officers, revealed that generally the interviews were conducted in accordance with the guidelines provided in the *Memorandum of Good Practice* (Home Office, 1992)⁴¹ but in more than enough cases children were not allowed sufficient opportunity to describe the incident in their own words; the evidential quality of the majority of the tapes (75 per cent) was judged to be satisfactory (that is, gave a clear account of the incident). Finally, those interviewing a child on tape (mainly female police officers) were generally more supportive and more likely to adjust their questioning to the child's linguistic style and, in such cases, the child was rated as less anxious than in interviews conducted during the trial by lawyers.

It should be noted in this context that mock-juror research by Ross et al. (1994d) in the United States has reported that the use of protective shields and video-link, devices aimed at protecting children from trauma in the courtroom, do not impact adversely on the interests of defendants. Davies et al. (1995) found no significant differences between videotaped evidence and live examination-in-chief as far as actual jury verdicts in England and Wales are concerned. Davies et al. also reported that children waited an average of five months for their case to go to trial; waited 2 hours and 20 minutes inside the courtroom to testify; most of them were given a tour of the courtroom before testifying and a minority were introduced to the Live Link, but 30 per cent received no such preparation. Finally, most children would not have preferred to have given their evidence at trial. On the basis of their findings, Davies et al., *inter alia*, recommend improving interviewer training so that a greater percentage of such interviews will comply with the guidelines provided in the *Memorandum of Good Practice*; fast-tracking cases involving children as witnesses to avoid delays; and, finally, encouraging judges to be more effective in protecting children from inappropriate or intimidating tactics by counsel (see also Davies, 1994; Walker, 1993; Westcott, 1995).

Delays and confronting the accused are not the only stressors for child witnesses. Kelly (2002) also mentions: public exposure; understanding the procedures; the trial outcome and the lack of preparation. Of course, the very prospect of giving evidence is an additional pressure for children. The London (Ontario) Family Court Clinic's evaluation of a program designed to prepare children for court in the early 1990s

(Child Witness Project, 1991, cited by Kelly, 2002:371) examined a sample of 675 reported cases. It was found that in the majority (63 per cent) of them no charge was laid and where the child was aged 2–8 years a charge was laid in 14 per cent of the cases.

Regarding the effect of closed-circuit television on the child, according to Cashmore (2002), there are no figures available for actual court studies to indicate whether it reduces the likelihood of children refusing to testify. Goodman et al.'s (1998) court simulation study found that children were less likely to refuse if they could testify via closed-circuit television rather than in the courtroom. As far as the use made of video interviews of child witnesses is concerned, Hamlyn et al. (2004) reported that about 42 per cent of the children in their sample were video interviewed.

3 CHILD WITNESSES AND POPULAR BELIEFS ABOUT THEM

Children, of course, appear as witnesses in both criminal and civil cases. It should also be noted in this context that official figures for child molestation, for example, grossly underestimate the sexual abuse of children (Feldman, 1993:13). But what is known in general about children likely to end up as a witness in a criminal trial? Lipovsky et al. (1992) examined the characteristics of 316 criminal cases that involved children as potential witnesses in nine judicial circuits in three states in the United States that were adjudicated through a guilty plea, acquittal or conviction. Most of the cases involved sex crimes against children. It was found that only 16.8 per cent of the cases went to trial as most were resolved by a guilty plea. It was also found that the average child involved in the criminal justice system was a 10-year-old, white female who had been victimised by a parent or an acquaintance.

According to Davies (1991:179) and Gudjonsson (1992a:93), a number of views have underpinned the law's traditional treatment of children as second-class witnesses, namely, that: they are not as good as adults as far as observing and reporting events is concerned; they are prone to fantasise about sexual matters (Freud, 1940); they are highly suggestible (Binet, 1900); they are relatively unable to distinguish reality from fantasy (Piaget, 1972), and they are prone to confabulate (Saywitz, 1987). There is, of course, the popular but incorrect view that 'children never lie' (Ceci and Leichtman, 1992).⁴² The reader should note in this context that child witnesses are rated as less credible than adult witnesses by mock jurors (Pozzulo et al., 2006). Also, for children and young witnesses to do themselves justice in court they need to have an accurate understanding of relevant legal terminology. Twelve- to fifteen-year olds were found by Crawford and Bull (2006) to confuse 'defendant' and 'defence lawyer', 'jury' and 'lawyer' or 'judge' and 'cross-examination'. As far as the accuracy of child witnesses is concerned, it can be determined easily in experimental research but in real cases it is not easy to establish if a child is lying or not. Regarding professionals' beliefs about child witnesses, a Norwegian questionnaire survey of 478 professionals (that is, judges, police

detectives, psychologists, child psychiatrists, prosecutors and defence lawyers) by Melinder et al. (2005) found that psychiatrists and police officers had greater belief in children's capacities than the other groups whereas psychologists and defence lawyers were sceptical about child witnesses' credibility. Finally, the fantasy beliefs (for example, in the 'tooth fairy') of 5- and 6-year-old children impact on their recall accuracy in such a way that they report supernatural experiences with their fantasy belief (Principe and Smith, 2007). Let us next examine the validity of the myths mentioned above by taking a close look at empirical studies reporting on children as witnesses.

4 CHILDREN'S REMEMBERING ABILITY

As Fivush (1993) rightly pointed out, examination of the literature on children as witnesses reveals an imbalance: while there now exists a large volume of published studies on the accuracy and suggestibility of children's memory, very few researchers have concerned themselves with children's memory performance from a developmental psychology perspective.⁴³ In this context two crucial questions are: (a) What differences in memory accuracy exist between children of different ages? and (b) How do children of different ages compare with adults in terms of accuracy of their reports? As far as the meaning of 'accuracy' is concerned, writing about research into autobiographical recall, Fivush (1993) offered an operational definition of 'accuracy' in terms of the 'agreement between the individual's recall and either an objective record of the event or social consensus from other participants of the event as to what occurred' (p. 2).

Regarding the relationship between children's memory accuracy and age, as early as 1902, on the basis of his memory experiments with subjects aged 7–18 years, Stern reported that the amount of information given in free recall increased steadily with age. Stern (1902, cited by Davies, 1991:179–80) also reported that the older the subject, the more accurate the answers elicited by direct questioning. Goodman et al. (1987) also confirmed Stern's finding that while 6-year-old children generally remember less information than adults, they are able to give accurate descriptions if asked to freely recall, but 3-year-old children are less accurate than older children. Clifford (1993) reported experimental comparisons of children aged 4–5 vs 9–10 under immediate recall or one week's delay and children aged 7–8 vs 11–12 recalling what they saw on a video after one or five days. Clifford found that memory increases with age. Pillemer and White's (1989) comparison of 3 vs 5-year-olds' recall of a fire-drill found that the younger children confused what had occurred first – the fire alarm or leaving the building. With a five-minute delay, 5–6-year-olds recalled less information about being touched than did 9–10-year-olds (Leippe et al., 1991).

Ornstein et al. (1997) analysed data on 232 children aged 3–7 years who had been interviewed immediately following a paediatric examination and again after

'By age 3, children's memories are remarkably accurate and enduring. Moreover, children seem able to recall stressful experiences at least as well as more mundane occurrences. However, we must be cautious in drawing implications for forensic settings. Not all events are recalled in the same way' (Fivush, 2002:65).

a delay of 1, 3, 6 or 12 weeks. In support of other researchers, they found open-ended and total recall increased and forgetting decreased with age. The researchers attributed the changes in performance to age-related increases in encoding. A New Zealand study by Salmon and Pipe (1997) compared the recall accuracy of 4- and 6-year-olds three days vs one year after seeing a doctor medically examine a large teddy bear. They found that the recall accuracy of 4-year-olds dropped from 87 per cent to 69 per cent a year later while that of the 6-year-olds was not so affected. As far as the memory performance of school-aged children is concerned, Peterson (1999) examined 2–13-year-old children's memory for an accident and the medical treatment provided subsequently. They found no differences in the number of event components reported by 8–9-year-olds and 12–13-year-olds and the accuracy of children's recall did not increase after the age of 8–9. Regarding the importance of a child's age at the time of encoding and the length of a retention interval, Hammond and Fivush (1991) interviewed children who had been to Disneyworld at approximately the age of $2\frac{1}{2}$ or $4\frac{1}{2}$ after an interval of 6 or 18 months and found that the older children's recall was more spontaneous and more detailed. Brigham et al. (1986) found that Grade 4 children did significantly worse in a photo line-up identification task of a familiar person than Grade 8 and 11 children. Finally, Candel et al. (2007) examined the *memory conformity effect* of children aged 6–7 and 11–12 years who watched a video individually or with a co-witness. The dyads believed they were viewing the same video as the other member of the pair while, in fact, they saw different versions. Children in the individual witness condition answered questions while those in the co-witness condition discussed with each other the event depicted in the video. It was found that in the co-witness condition more than 60 per cent of the children recalled at least one detail from the alternative video but the corresponding figure in the individual condition was 23 per cent. Also, the older children showed more conformity in the free rather than in the cued recall condition.

The literature review by Fivush (1993) of the amount and accuracy of children's autobiographical recall concluded that the empirical evidence shows even young preschoolers to be rather accurate and to retain over considerable time information about events they experienced themselves (p. 8). The same studies,⁴⁴ however, show that preschoolers' recall is not as detailed or as exhaustive as older children's recall; preschool children recall better with the assistance of cues, prompts and so forth and they do not recall as much information spontaneously, irrespective of the length of the retention interval (Fivush, 1993:9); and, finally, unlike older children or adults, preschoolers focus on and remember different aspects of an event (p. 17). Almost a decade later, Fivush (2002) concluded her discussion of autobiographical memory stating that, 'By age 3, children's memories are remarkably accurate and enduring. Moreover, children seem able to recall stressful experiences at least as well as more mundane occurrences. However, we must be cautious in drawing implications for forensic settings. Not all events are recalled in the same way' (p. 65). Fivush goes on to add that how an event is remembered and narrated by a child is influenced both

by the level of stress experienced and at what age the child had that experience, as well as by whether the child has discussed the experience/s with others. Finally, 'Events which are distinctive, public, and openly discussed will most likely be well recalled, but the fate of memories of private, undisclosed events is still in question' (p. 65).

Of course, as Fivush (1993) reminded her readers, if a child requires numerous specific questions to remember an event in the courtroom, the less credible such testimony will be seen, a factor that no doubt will be exploited in cross-examination, 'a legal process and language style geared to test and negate what the witness, for the other side, has to say' (Brennan, 1995:71). It should be remembered in this context that research evidence (Zajac and Hayne, 2005) indicates that the negative effect of cross-examination questioning style on children's recall accuracy is evident with both young children (aged 5 and 6 years) as well as older ones (aged 9 and 10 years). The older ones, however, appear to be less vulnerable to the cross-examination style effect. Furthermore, if a child is asked cued questions, they may well be objected to as being 'leading questions' or even misleading, while if the child's recall is in response to open-ended questions only then is his/her testimony likely to be incomplete and to be perceived as inaccurate. It is in such a context, having to strike a balance between the two types of questioning with their respective dangers, that a technique like the 'cognitive interview' is useful (see chapter 3 and below).

Another factor that may very well impact on a magistrate's, judge's or juror's perception of a child's testimony accuracy is the degree of consistency (that is, stability over time) that characterises a child's recall of the same event on different occasions.⁴⁵ Such inconsistencies seem attributable to the fact that preschoolers have limited general knowledge, limited retrieval structures and focus on routine and general information (Hudson, 1986; Nelson, 1986, cited by Fivush, 1993:12). Consequently, even though they encode a great deal of information, they have difficulty retrieving it when interviewed and are thus vulnerable to the effects of multiple interviews. The fact is that young children (for example, aged 3–6) can be accurate if asked specific questions. However, if such children are asked different questions about the same event in different interviews, they are likely to yield inconsistent responses (Fivush et al., 1991), even though they are not likely to incorporate much of the information supplied them by an adult during questioning into their subsequent recall of the event (Fivush, 1993:15). Of course, rather young children being cross-examined by a lawyer in court can experience the questioning as oppressive and abusive because of the verbal tactics used (Brennan, 1994). Such verbal tactics are difficult for young child witnesses to cope with well because they are cognitively complex and involve legal terms, for example (Myers et al., 1996). In such cases, the judge should ensure that the cross-examination is conducted with the child's communicative competence in mind. Let us next consider another popular belief about children, namely, that they routinely lie, as well as the detection of children's deception by adults.⁴⁶

Children as young as four years can correctly identify lies and themselves intentionally lie or tell the truth.

5 DECEPTION IN CHILDREN

Ceci and Leichtman (1992) showed that 3-year-olds are able to misinform others by, for example, telling the interviewer that they did not know who broke a toy or claiming it had been broken by someone else. According to Vrij (2002), it is generally accepted that children are capable of telling deliberate lies at 4 years of age (Newton et al., 2000). Lewis et al. (1989) reported that about half of the 3-year-olds in the US can tell lies with enough control of their facial muscles to avoid detection. Talwar et al.'s (2002) study with children aged 3–7 years found that they had appropriate conceptual knowledge of lying and truth-telling and the obligation to tell the truth and that their lying was reduced significantly if they promised to tell the truth. Drawing on Vrij (2002), it can be said that even 3-year-old children will lie when they have a motive, such as to avoid punishment, to protect a loved one or because someone has asked them to do so, while older children may also lie for a reward. Children at a very young age misinform by concealing information. There is also some evidence that: compared to older children, younger ones will show more clearly non-verbal indicators of deceit, such as signs of nervousness or signs of hard thinking; with increasing age, children become better liars; parents are better at detecting lies in children than non-parents; it is easier to detect lies in children by listening to their voices than by looking at their faces; and, finally, observers are less likely to believe introverted and socially anxious children. Vrij concludes that 'a clear picture about children's ability to lie (in court) and people's ability to detect such lies does not exist' (p. 190). Finally, sociologists tell us that there are cultural differences as far as children's lying is concerned (Barnes, 1994).

6 FACTORS THAT IMPACT ON CHILDREN'S TESTIMONY

Researchers have established that a child's mind interacts with his/her physical and inter-personal environment (Fischer and Bullock, 1984). Therefore, it makes sense to conceptualise a child's accuracy or suggestibility as a witness, not only as something the child is not capable of because of his/her level of cognitive development, but also as reflecting a particular context (Batterman-Faune and Goodman, 1993:303). In other words, the extent to which a child is familiar with a particular environment and what his/her expectations are about a particular context will impact on how a child will perceive and later remember a situation. It follows that a child's age is but one important factor in evaluating children as witnesses.⁴⁷ To illustrate, Peterson et al. (2006) investigated how *parents' linguistic style* (that is, how they reminisce about a stressful event (such as, their children's injuries that required hospital emergency room treatment) experienced by their children impacts on their children's recall a few days or two years later. They found that children with parents who were more elaborative in reminiscing with them recalled more during the initial interview (see also 'Stressful events' below).

Past abuse: Goodman et al. (2001) investigated the effect of child maltreatment on children's eyewitness testimony by comparing a matched sample of abused children with a non-abused group. The 70 children studied were aged 3–10 years old and took part in a play session with an unfamiliar adult and were tested about the experience two weeks later. As would have been expected on the basis of previous research, the reports of older children were more complete and accurate. It was also found that non-abused children were more accurate in answering specific questions and made fewer errors in identifying the unfamiliar adult in a photo identification task and (especially for younger non-abused boys), freely recalled more information. Comparing abused children themselves, Goodman et al. found that those children who had suffered more severe sexual abuse made more omission errors to specific abuse-relevant questions. Finally, past abuse experience did not make children more suggestible in response to questions that were relevant to abusive actions.

Presence of the perpetrator: researchers have paid very little attention to the importance of sociocognitive factors such as a witness' motivation or expectation in children's eyewitnessing, concentrating instead on whether children are reliable witnesses (Bussey et al., 1993:148). Social cognitive theory emphasises the significance of a witness' anticipated outcome of disclosing an event (Bandura, 1986). Such outcome could be whether one would be believed, supported, embarrassed, shamed or punished as a result of reporting an event, especially if a witness has promised not to do so or has been warned against doing so and threatened with adverse consequences. Such concerns by children could well underpin false allegations and false denials by children. It has been found, for example, that the presence of the perpetrator makes it less likely that children aged 3, 5 and 9 years will report the perpetrator's misdeed (Bussey et al., 1991, cited by Bussey et al., 1993). Furthermore, as we have seen already, the intimidating presence of the perpetrator can influence a child's testimony itself. In a study by Peters (1991) children witnessed a staged robbery and were then interviewed alone or with the robber present. In the robber-present condition the amount and accuracy of what the children reported was significantly affected, resulting in five times fewer children reporting what they had seen. Findings such as this provide experimental simulation support for the US Supreme Court's decision in *Maryland v. Craig*, allowing children not to have to confront the defendant. Not paying attention to motivational factors is indeed a major omission by researchers when we remember that, contrary to popular belief, children as young as 5 (Peterson et al., 1983) and even 4 years (Haugaard and Crosby, 1989, cited by Bussey et al., 1993) can correctly identify lies and can themselves intentionally lie or tell the truth.

Children can and are routinely interviewed about an alleged event in a great variety of contexts. Tulving's (1983) principle of encoding specificity emphasises the importance of reinstating the environmental context at the coding stage when asking subjects to recall an event. Providing cues specific to the context of the

event in question is especially likely to facilitate children's recall (Dietze and Thomson, 1993).

Stressful events: like adults, children get exposed to a lot of violence in society in one way or another. As already mentioned, testifying in a courtroom is in itself a source of significant stress for most children and often impacts negatively on their testimony in terms of both the quantity and accuracy of their reports (Hill and Hill, 1987). In fact, a child may be too frightened to attend court to give evidence in a trial (*Neil v. North Antrim Magistrates' Court and another* [1992] 4 All ER 846). This fact should be of great concern to all who are interested in the welfare and rights of children. While it is important to balance the rights of child witnesses with the rights of defendants, it should be remembered that children are called to testify as victims and/or witnesses to such traumatic events as sexual abuse, domestic violence, shootings, stabbings, robberies, murder,⁴⁸ even the killing of one parent by another (see Burman and Allen-Meaves, 1994) and serial murder, and are psychologically affected⁴⁹ (Herkov et al., 1994). It is, therefore, of crucial importance to know how well children remember and testify about such experiences.

It has been reported that children's memories for such very traumatic incidents as kidnappings, killings of loved ones and a sniper firing on a school contain both accuracies and inaccuracies (see Pynoos and Eth, 1984; Terr, 1991). Warren and Startwood (1992) found that children who were more upset by the space shuttle Challenger tragedy remembered more details of the event than did children who were less upset. Similarly, a study by Steward (1992)⁵⁰ reported that children who were more upset by a painful medical procedure remembered more details and were more accurate than children who were less upset. These findings are consistent with results reported by Goodman et al. (1991). However, the relationship between anxiety and memory in the context of testifying about a stressful event is more complex than some authors (for example, Peters, 1987) have suggested. In contrast to Goodman et al. (1991) and Peters (1987), Vandermaas et al. (1993) reported a negative impact of anxiety on 3–8-year-olds' identification accuracy of target persons associated with a dental visit. Vandermaas et al. (1993) had children aged 4–5 and 7–8 years visit for a teeth-cleaning checkup or an operative procedure. They found that: high anxiety had a detrimental effect on the reports of the older but not the younger children; while experience with the dental event was found to mediate the influence of age and anxiety on memory, older children did not offer incorrect information spontaneously, and young children infrequently made errors of this type; asking younger children specific questions was what caused them to give incorrect information, and all children gave incorrect information in response to specific questions regarding peripheral details about a routine event (Vandermaas et al., 1993:123). Finally, there was no difference in recall of central vs peripheral information due to anxiety level as would have been predicted on the basis of Easterbrook's (1959) hypothesis (see chapter 2). Differences between studies in this area would seem to reflect differences in the types of events involved

and children's degree of familiarity with them as well as differences in how soon subjects are asked to recall (for example, immediately or weeks later), the level of anxiety involved and how it is measured.

Leading Questions: children can be asked to free recall an event, can be asked specific questions about it or leading and even misleading questions. One primary concern about children's testimony has been that they are susceptible to the effect of suggestive questioning, that is, they are suggestible (Bruck and Ceci, 1995; Ceci and Bruck, 1993; Spencer and Flin, 1990). Widely publicised child abuse cases like the *McMartin* case in California (cited as *People v. Buckey*, No. 750900 (Cal.Cr.Dt.Ct 1984)), portrayed in the film *The Indictment*, and *Michaels* in New Jersey (*State of New Jersey v. Margaret Kelly Michaels*, 625 A.2d 489 (N.J.Super.Ct.App.Div.1991),⁵¹ and the report into child abuse in Cleveland and Nottingham in the UK illustrate rather convincingly the dangers that are inherent in suggestive questioning and how zealous, incompetent and unethical therapists and investigators can use such interview procedures to solicit from child witnesses the answers they need, rather than the facts of the case, in order to safeguard their own vested interests and in the process also construct the case for the prosecution. Such malpractices are made worse by the frequent lack of communication and cooperation between such agencies as the police and community services. Grave concern about children's suggestibility and vulnerability to suggestive questioning underpinned the *amicus* brief filed in the *Michaels* case (see Bruck and Ceci, 1995) co-signed by social scientists, psychological researchers and scholars. In *McMartin*, members of a family, including an elderly grandmother, running a child care centre, were charged, on the basis of a great deal of rather questionable evidence obtained by means of suggestive questioning, with numerous counts of child sexual abuse against many of the children at the centre. After 2489 days of the court's time and \$15 million costs the case ended up with a hung jury at the retrial. Dubious procedures by one particular therapist and district attorney investigators, combined with the effects of wide sensational coverage by the media, ensured that the principle of the innocence of those accused until proven guilty was overridden, forever maring the lives of the children themselves and their families as well as the innocent individuals falsely accused and kept in custody for years.

Researchers (such as Garven et al., 1998) have demonstrated, for example, that repeating a question, asking a child to speculate, reinforcing a child positively or negatively for answers given and inviting a child to imagine an event have a greater impact on a child's testimony than leading questions. The reader should note in this context that there are individual differences in suggestibility (Eisen et al., 2002). According to Gignac and Powell (2006) children's suggestibility appears to correlate with a certain level of the normal IQ range (approximately 105) and, also, that mental age (that is, degree of intellectual disability) is a better predictor of children's recall accuracy than verbal or non-verbal IQ (Henry and Gudjonsson, 2006). Furthermore, a Norwegian study of 7-year-olds by Melinder et al. (2007) has reported marked differences in suggestibility and that children undergo rapid

cognitive and social development between the age of four and seven. Incidentally, regarding the effect of intellectual disability on children's recall, an Australian study by Agnew and Powell (2004) had 80 children aged 9–12 years with a mild or moderate intellectual disability actively participate in a 30-minute magic show at school, matching with two mainstream control groups – one matched for mental age and the other matched on chronological age. They reported that intellectually disabled children were able to provide accurate and highly-specific event-related information but, as would have been expected, their recall was less complete and less clear in response to free-narrative prompts and less accurate in response to specific prompts compared with the two control groups. Since the early 1990s experimental psychologists have amassed a lot of knowledge about various potential sources of children's suggestibility. The psychological insights gained can be used to identify poor interview procedures with child witnesses that corrupt the reliability of the prosecution's evidence, and provide guidance on how to guard against suggestive interviewing that is useful in the training of various professionals. A very good example in this context is the tremendous amount of advisory guidance to be found in *Achieving Best Evidence in Criminal Proceedings: Guidance for Vulnerable and Intimidated Witnesses* (Home Office, 2002; Home Office and Department of Health, 2007).

Implanting False Information in Children

As Pezdek and Hinz (2002) remind us, the establishment of the False Memory Syndrome Foundation by Pamela Freyd in March 1992 'served as a call to action for cognitive psychologists studying memory' (p. 99). Pezdek and Hinz reviewed six research programs in which attempts had been made to plant false events in memory⁵² and concluded (p. 113) that:

- under some conditions, some false events can be planted in memory
- plausible false events are more likely to be planted than implausible ones
- a suggested event is more likely to be incorporated into memory if one has prior knowledge of it
- children are more suggestible than adults and younger children (aged 5–7 years) are more suggestible than older ones (aged 9–12 years).

Pezdek and Hinz (2002) go on to remind the reader that: 'Beyond this, we have more questions than answers because the research is riddled with methodological problems' and, meanwhile, 'The call to action to cognitive psychologists provided by the False Memory Syndrome Foundation continues' (p. 114). Lee and Bussey (1999) have shown that 7-year-old children are not immune to misinformation effects even when tested on material (relationships between rooms, clothing and fruit) for which they had previously learned criteria and for which they had been tested and had a good memory.

When considering the effects of misleading questions on children's memory, it should be noted that there is an important interviewing variable, namely a child's *self-esteem*. Australian researchers Howie and Dowd (1996) found that children with low self-esteem (on the basis of teachers' ratings) are more disadvantaged. Empirical support for Howie and Dowd's finding has been reported by Vrij and Bush (2000), who used the Behavioural Academic Self-Esteem Scale⁵³ and found that younger children (aged 5 and 6 years) are more suggestible than older ones (aged 10 and 11 years) but this difference disappeared when they controlled for children's self-confidence.

A child's self-confidence is important when considering the relationship between age and suggestibility.

Bruck and Ceci's (1995) *amicus* brief in *Michaels* provides an excellent summary of research findings regarding children's suggestibility. The conclusions they reached then have not been altered significantly by subsequent research. They identify the following nine potential sources of suggestibility for children which they document with references to empirical studies.

Interviewer bias

If an interviewer believes that a child has been sexually abused and that is the only hypothesis he/she is interested in confirming, he/she may very well bias the interview outcome by utilising one or more of the ways mentioned next, in order to obtain from the child a report that is consistent with his/her blinkered view of the allegations made (pp. 273–9).

Repeating questions

Repeating questions in the course of the same interview or in different interviews may lead preschoolers aged 3–6 years old to change their original answers (p. 279) and to increase false reporting (Leichtman and Ceci, 1995). It should also be noted in this context that studies examining the effects on children of repeated interviews in the short term have yielded mixed results and researchers have not addressed such effects in the long term (Edelstein et al., 2002:267).

Repeating misinformation in interviews

As a result of repeating misinformation in different interviews, children may well come to incorporate the misleading information in their subsequent reports and/or distort the misinformation itself (p. 280).

The interviewer's emotional tone

Children may be led to fabricate information if they are asked in an accusatory tone, 'Are you afraid to tell?', or are likewise told that, 'You'll feel better if you tell' (p. 281) or, finally, to falsely assent to abuse-related tag questions such as, 'Amy touched your bottom, didn't she?' (Krackow and Lynn, 2003).

Peer pressure

Telling children in an interview that their peers have already answered a particular question and/or that another child victim has already named them as having been abused and/or is threatening them with exposure to their peers for being uncooperative (p. 283) makes them want to change their answers so as to be consistent with their peers (pp. 283, 285) and provide the answers an interviewer wants to hear.

Being interviewed by adults in authority or of high status

Children's comprehension of legal processes is dependent on their understanding of the role and powers of legal personnel. In the case of police officers, young children's (aged 5–9 years) perceptions of a police officer's status are dominated by the uniform (Durkin and Jeffery, 2000). A child being interviewed by a police officer or a Youth and Family Services investigator or a sexual abuse consultant is likely to want to please such an adult figure by providing answers the child believes the authority figure would like to hear, and is also likely to accept such an adult's account of an alleged event (p. 285). Professionals interviewing child witnesses will do well to remember Ceci and Bruck's (1995) warning that the accuracy of children's reports may be negatively influenced if the interviewer is of high status and perceived to be powerful. The wisdom of so doing is strengthened by the empirical evidence (Shanab and Yahya, 1977) concerning children's desire to be obedient, as measured by the Milgram (1974) obedience procedure.

The induction of stereotypes

Suggestive interviewing may take the form of the interviewer telling a child that a particular person 'does bad things' or that bad people have certain facial characteristics. Such information may then be incorporated by the child into a subsequent report about his/her interaction with that individual (p. 287). Greenhoot (2000) reported that 5–6-year-old children's impressions of child characters in stories can be a function of whether they receive in advance positive or negative information about them. Finally, empirical evidence for the importance of stereotypes has been reported by Price (1996),⁵⁴ who found that children aged 8, 12 and 16 years match particular unattractive female faces with some particular crimes.

Ethnicity of child witness

Ethnicity has been neglected in child witness research. British researchers Sattar and Bull (1999) compared the testimony of two groups of children (Asian and Caucasian) who were interviewed by Asian or Caucasian interviewers. The 81 children involved were aged 8–11 years and were interviewed about a magic show, during which a confederate interrupted, asking the magician for a book. No differences were found between the two groups of children as far as free recall accuracy is concerned or as a function of the ethnicity of the interviewer. However,

when asked a misleading question Asian children were less likely to say they did not know the answer, probably because they considered it disrespectful to the interviewer (p. 14).

The use of anatomically detailed dolls

Three-year-old children interviewed with the aid of an anatomically detailed doll are likely to inaccurately report being touched and/or to insert their fingers into the anal or genital cavities in the doll even though nobody has done so to them (pp. 289–1) (see also below).

Source attribution errors

The phenomenon of source attribution error was dealt with in the previous chapter. Young children (6-year-olds) are vulnerable to confuse what they have seen with what has been suggested to them and, consequently, to make false reports (pp. 294–6), making it difficult to detect real abuse (p. 310).⁵⁵

Bruck and Ceci (1995) go on to add that children who have been subjected to suggestive interviewing often appear highly credible and can fool even well-trained professionals (p. 301) and, furthermore, the effect of such interviewing ‘may be long lasting’ (p. 303). As seen in the previous chapter, adults, too, have been shown to be suggestible (Gudjonsson, 1992a:143). In contrast to the popular belief that suggestibility is age-related and a personality trait, in Gudjonsson and Clark’s (1986) social psychological model suggestibility is conceived of as the outcome of a complex and dynamic interaction between an individual, the environment and other important persons in that environment. Gudjonsson and Clark believe there are three factors that predispose someone to be susceptible to leading questions: uncertainty, interpersonal trust and expectations. However, even if these factors are present in an interview, a witness is likely to resist the effect of suggestive questioning if he/she is suspicious of the interviewer (Gudjonsson and Clark, 1986; Siegal and Peterson, 1995; Warren et al., 1991). Four potential sources of suggestibility for children are: (1) demand characteristics; (2) the credibility of the misleading information; (3) repeated interviews; and (4) the linguistic form of the question (Gudjonsson, 1992a:94–5; Moston, 1990).

While some authors point to the increased suggestibility of preschool children in particular,⁵⁶ others emphasise children’s ability to resist the influence of leading questions,⁵⁷ especially when interviewed by a supportive person,⁵⁸ while others have found 6-year-olds more suggestible than 8-year-olds to negative (that is, suggesting incorrect ‘facts’) but not to positive-leading questions.⁵⁹ Goodman et al. (1990) reported that children as young as 3–4 years can resist suggestive questioning of the type used in sexual abuse investigations for up to a year after the incident. A child’s ability to resist the effect of suggestive questioning appears to be a function of a witness being suspicious of the interviewer (Gudjonsson and Clark, 1986; Siegal and Peterson, 1995; Warren et al., 1991). The Australian study by Siegal and Peterson examined resistance to suggestibility among 4- and

5-year-olds and concluded that, 'children are not inevitably vulnerable to suggestion in simple salient situations where they have a strong knowledge base' (p. 40). Support for this view was provided by Saywitz et al.'s (1991b)⁶⁰ study, which found that exposing children to an alternative set of expectations and beliefs about answering questions resulted in a 26 per cent decline in percentage of error when responding to misleading questions in comparison to a control group.

Davies (1993b) provides an excellent discussion of the empirical literature on children's identification,⁶¹ concluding that, even though the testimony of young children (4–8 years) is not likely to be as accurate and complete as that of older children, children can provide identity information of significant potential forensic usefulness but such information must be elicited by skilled interviews and appropriate questioning (p. 243). More specifically, children are least likely to show age differences in identification tasks but are most likely to do so if asked to estimate a suspect's height or weight or to furnish a description of a suspect's face for police to construct a face composite image (pp. 252–3). Finally, like adults, children's performance as eyewitnesses is influenced by situational demands. In other words, both their cognitive development and how they are approached as witnesses play a significant role in their accuracy as eyewitnesses. It should be remembered, however, that the findings reported by empirical studies of child witnesses are based on group accuracy data. This should not be allowed to detract from the potential usefulness of the individual child of rather young age who has every right to be heard and evaluated as a witness in open court like everybody else (Davies, 1993b:253).

Children vs Adults

The methodology of research into children's testimony has shifted in recent years from the laboratory to the field as slide and video presentations have been, to an extent, superseded by real-life staged events or the utilisation of naturally occurring events (Clifford, 2002:333). Children as young as 4 have been found to be as good at colour memory as adults (Ling and Blades, 1995). Generally, however, research into children's memory vs adults' has yielded inconsistent results (Leippe et al., 1993:170). To illustrate, in a highly cued memory task Sheingold and Tenney (1982) found that school-age children could recall accurately as much as adults about the birth of a sibling when the subjects were 4 years old. However, in another study involving cued recall of being touched, Leippe et al. (1991) reported that 5–6 and 9–10-year-olds performed more poorly than did the adults in free recall and when asked objective questions, but both groups of children performed significantly more poorly than did adult subjects in a line-up identification task (both in correctly identifying the person who had touched them as well as correctly rejecting a target-absent line-up (see also chapter 9).

Even though the testimony of young children (4–8 years) is not likely to be as accurate and complete as that of older children, children can provide identity information of significant potential forensic usefulness but such information must be elicited by skilled interviews and appropriate questioning (Davies, 1993b:243).

Clifford (1993) has drawn attention to the fact that if one reads five pre-1984 textbooks in eyewitness testimony one finds they state that children are poorer witnesses than adults, presumably on the basis that they have poorer memory capabilities. This is in contrast to post-1984 literature, which portrays children as being much better witnesses than was thought earlier on and in some ways as being not significantly different, if not better, than adults (p. 15).

Clifford's (1993) study reported an impressive series of six experiments concerned with comparing adults aged 18–39 and children aged 4–17 years as eyewitnesses and concluded that whether one considers studies using children as actively involved witnesses or as mere bystanders, there is no strong evidence that young children's recall or identification performance is significantly different from that of adults. In fact, if one focuses on the more forensically relevant studies, children emerge as inferior eyewitnesses to adults; the term 'young' as used in the literature is ambiguous and needs scrutiny; 11–12-year-olds are comparable to adults as witnesses; and, finally, one needs to turn to the sociology of knowledge for an answer to the question of whether children are comparable to adults as eyewitnesses and why this was answered by numerous researchers in the negative until the mid-1980s but in the positive since then (p. 20).

In support of Clifford (1993), Loftus et al. (1989) reported that the amount of information free-recalled by children aged 12 or older is as good as that provided by adults and, furthermore, they are no more susceptible to the effect of leading questions. We now know (see Goodman et al., 1987) that when children's recall is influenced by leading questions, it is not with reference to central detail but rather peripheral. There are, of course, situations when children can be vulnerable. Children seem more prone than adults to false identification in a line-up of strangers they have seen briefly (Parker and Carranza, 1989). Davies et al. (1988) asked children aged 7–8, 8–9 and 10–11, who had helped a stranger at their school set up a film show, to try and identify him from twelve photographs. It was found that all age groups selected him 65 per cent of the time when his photograph was present in the array. However, when his photograph was absent, 87 per cent of the 7–8-year-olds selected a photograph compared to 50 per cent of the two older age groups; in other words, the 7–8-year-olds had an apparent 'urge to please' (Davies, 1991:182).

When considering the importance of a child's or a young person's testimony, it is also important to remember that a witness' age appears to be related to how credible he/she is perceived and, consequently, to the likelihood of the defendant being convicted. Nightingale (1993) reported that the number of guilty verdicts and the witness' credibility in a sexual abuse case decreased as the age of the child in the experiment increased from 6–14 years. Nightingale also found that mock jurors blamed the older victim more.

The completeness and accuracy of children's testimony parallels their general cognitive development with increased age.

Whether one considers studies using children as actively involved witnesses or as mere bystanders, there is no strong evidence that young children's recall or identification performance is significantly different from that of adults.

As far as line-up performance is concerned, children can be as good as adults in identification of a perpetrator from a target-present array (Pozzulo and Lindsay, 1998) but produce more false positive errors than adults in a target-absent line-up (Lindsay et al., 1997), a proclivity which is reduced significantly if an elimination line-up is used (Pozzulo and Lindsay, 1999). In this procedure, the child eliminates (one by one or all at once) all but one line-up member before being asked if the remaining one is the actual person.

Davies (1991:182) concluded that the completeness and accuracy of children's testimony parallels their general cognitive development with increased age. However, it is not possible to identify a particular age before which children are 'bad' witnesses. Quality of recall is largely context-dependent, that is, 'the same child may be a good witness in one situation and poor in another... Children can be convinced that one set of photographs must be of a man they have seen before but not the same stranger who sexually assaulted them' (p. 182). While children with mild learning disabilities are vulnerable to suggestion, even when interviewed utilising the cognitive interview (Milne and Bull, 1995), Davies' conclusion that suggestibility is not some kind of universal trait with which all children are invested, is supported by Gudjonsson (1992a:94–5), Ceci and Bruck's (1993) and Clifford's (2002) reviews of the concept.

We can conclude that the available psycholegal research shows that, as Naylor (1989) put it: 'children can be good witnesses when their special needs are understood' – a conclusion that has clear legal implications (p. 82). The importance of social support for children in order to reduce stress during interviewing, an area neglected by researchers (see Moston and Engelberg, 1992), cannot be over-emphasised. Meanwhile, legal psychologists should be cognisant of the importance of the 'sociology of knowledge' for the type of research they carry out and what they decide to report. By 'sociology of knowledge' in operation Clifford (1993:15) means that knowledge (that is, research and the reporting of research) does not take place in a social vacuum; on the contrary, researchers produce what society demands and/or what it accepts as valid (see Wattam, 2002, for a stimulating discussion of the sociological approach to child witness research). Clifford has argued that the cause of children is better served by an acceptance of the evidence that children and adults differ as far as their memory capacities are concerned. Such an acceptance would lead the legal system to be more sensitive to children's needs when 'placed in situations that are inherently difficult for them' (p. 20). Approximately a decade later, Clifford (2002), argued convincingly that "the child-as-good-as adult" card should not be overplayed' because 'We must not let our rhetoric run ahead of our results' (p. 334).

7 ENHANCING CHILDREN'S TESTIMONY

Professionals who interview child witnesses should never forget that for children to disclose private information to a stranger they need to feel they can trust the

interviewer, and this is significantly more likely to occur if the interviewer helps the child to feel warm and comfortable and empathises with the child (Thorensen et al., 2006). It is now well established by researchers and recommended in official documents providing guidance on how to interview witnesses, including children and other vulnerable and intimidated witnesses.⁶²

We have already seen that providing contextual cues improves children's recall by aiding the retrieval process, as would be predicted on the basis of Tulving's (1983) 'encoding specificity' hypothesis. Given that children's recall of events is likely to be accurate but incomplete, findings from memory-training studies can be useful to assist their recall (Saywitz and Snyder, 1993:125). In a study by Saywitz et al. (1990) children aged 7–11 years were trained to use external visual cues, drawn on cards, to remind them to report a specified level of detail from categories of information (setting, participants, conversations, effective states, actions and consequences)⁶³ that would be useful in a criminal investigation two weeks after participating in a videotaped classroom event. It was found that the training resulted in better and more accurate free and cued recall without increases in inaccuracies (Saywitz and Snyder, 1993:128). Interestingly, it was also found that merely instructing the same children to be more complete was not effective. This study shows that, without infringing on the rights of the accused, children can be assisted with providing more complete recall before they are interviewed by police or testify in a courtroom.

Saywitz and Snyder (1991) trained children to be better at monitoring how far they understood what was being communicated to them and found that, unlike a control group, when confronted with difficult-to-comprehend questions about easily recalled information they were more likely to communicate that they did not understand a question and to request that it be rephrased (p. 137). As Saywitz and Snyder point out, a great deal of additional research is required before these methods can be used in actual forensic contexts (p. 138). On the basis of existing psychological knowledge, however, the potential exists for social workers, police personnel, lawyers and judicial officers to reduce significantly the negative influence on children's testimony of their limited communication skills.

Cue-cards and Photographs

As would have been expected, children are helped to remember better if the interviewer uses cue cards to help them focus their recall on specific categories (Camparo et al., 2001). The same effect has been reported if photographs are used (Paterson and Bull, 1999; Salmon and Irvine, 2002).

Open-ended Prompts

Hershkowitz (2001) reported an Israeli study that used the National Institute of Child Health and Human Development protocol for interviewing children that

offers specific guidance on open-ended prompts. Six experienced youth investigators conducted interviews with 40 girls and 10 boys, alleged victims of sexual abuse in various parts of Israel. Nine of the children were 4–6 years of age, 16 were 7–9 years of age and 25 were 10–13 years of age. It was found that open-ended prompts yielded significantly longer and more detailed responses than did focused prompts. A recent study by Lamb et al. (2007) investigated whether the type of prompt affects the accuracy of information provided by alleged victims of sexual abuse in forensic interviews. They interviewed 43 victims averaging 9.78 years of age and 52 youths who admitted to abusing them. They used either open-ended free recall prompts or focused prompts. In support of Hershkowitz (2001), they found that using the open-ended free recall prompt they elicited more accurate information than they did with the focused prompts.

The Cognitive Interview Technique

The cognitive interview (CI) technique (discussed in chapter 3), which has proved to be useful with adult witnesses (Geiselman et al., 1985), has also been used to enhance the amount and accuracy of children's recall.⁶⁴ Geiselman and Padilla (1988) interviewed children aged 7 and 12 years three days after showing them a video of a simulated liquor store robbery and found that, without increasing errors and confabulations, the CI produced 21 per cent more correct 'items' of information than did the standard interview where the interviewer only asked about the facts.

The cognitive interview can indeed improve the completeness of children's recall but its use is not without some problems.

Geiselman et al. (1990) used a 'Simon Says' touching game that involved an unfamiliar adult, one child 'victim' and one child witness and, again, it was found that significantly more facts were elicited using the CI than the standard interviewing technique with 7–8 and 10–11-year-olds. Geiselman et al. also reported, however, that: (a) there were differences between the interviewers regarding the extent to which they used the CI techniques; and (b) the interviewees differed in the ease with which they used different CI techniques; more specifically, the 7-year-olds especially had difficulty understanding what was meant when the interviewer instructed them to 'change perspective'. Geiselman et al. (1993) used a slide presentation and also staged two live events in front of groups of three or four third-graders aged 8 and 9 years and 11 and 12 years and found that the CI, with or without practice, elicited more correct facts than a standard interview and that giving children 'practice' with the CI techniques increased their recall performance even more. Geiselman et al. (1993) concluded that CI techniques can improve the completeness of children's recall, that children benefit from having prior practice with CI techniques before receiving a CI and, finally, that giving children practice with the CI about an unrelated event is good investment because it produces a more complete report from child witnesses and reduces the likelihood of children having to retell and relive details of traumatic experiences (pp. 88–9).

Milne and Bull (2002) examined the relative effectiveness and efficacy of each of the four original CI mnemonics as a function of age. Their subjects were first-year undergraduates and children aged 5–6 and 8–9 years who were shown a video-recording of an accident and were interviewed 48 hours later. They found that each of the four CI mnemonics was of equal benefit and resulted in no more recall than the ‘try again’ condition. However, significantly more correct recall was the result of combining the ‘recall everything’ and ‘context reinstatement’⁶⁵ mnemonics. Finally, whether the subjects were children or adults made no difference to the findings obtained.

Problems in using the CI technique with children have been reported by Köhnken et al. (1991)⁶⁶ who found that the CI increased confabulation. A British study by Memon et al. (1993) used a 2 (interview type: CI, standard) by 2 (test phase: two days, six weeks) with 6–7-year-olds who were videotaped while having their vision tested. The cameraman was a stranger who was introduced to them by name as the children arrived for their eye test. Children were asked to recall details of the event and the appearance of the cameraman. Memon et al. found that there was no difference in the relative effectiveness of the CI when used with children as compared with the standard interview, irrespective of the measure used to assess effectiveness. The one exception to this finding was that the CI elicited significantly more information about locations of objects and people (p. 7). One weakness of the Memon et al. study, which the authors themselves acknowledge, is that their subjects may have reinstated context when they were instructed not to do so by virtue of the fact that subjects’ recall was tested in a familiar setting (p. 8).

Differences between Memon et al. (1993) and other CI studies (for example, Fisher et al., 1994; Geiselman et al., 1993) concerning the effectiveness of the CI vs the standard interview reflect differences in how ‘effectiveness’ is measured. As Memon et al. (1993:7) point out, Geiselman and Fisher have always used total correct information as their measure of effectiveness when reporting the CI as more effective; however, when the ‘proportion correct’ measure is used, no significant differences between the effectiveness of the CI and the standard interview have been reported. In the absence of a standard scoring system for studies of this kind, inconsistent findings are inevitable and no definitive conclusions are possible concerning evaluations of the CI technique.

Milne et al. (1994) examined the effectiveness of their revised version of the CI for children aged 8–10 years. They found that as far as person details are concerned, CI children showed more incorrect recall and confabulations; and in questioning subsequent to an initial free recall, the CI children yielded 20 per cent more accurate information than did structured interview children. It was also reported that interviewing children with the CI reduced the impact of subsequent suggestive questioning. Another study by Wark et al. (1994) used the revised version of the CI as was used in the Milne et al. (1994) study with 8- and 9-year-old children and reported rather similar findings. Wark et al. also found, however, that there were no significant differences between CI and structured interview children when

recall was tested 11 days after the event – the CI only produced more information than the structured interview when recall was tested two days after the event. Similarly, Memon et al. (1997) found the CI led to more correct information (and errors) in open-ended recall when children were interviewed with two days' delay but not when there was a 20-day delay. On the basis of the studies cited, it can be concluded that the empirical evidence supporting the usefulness of the CI with children is not unequivocal. This is not to deny that the CI has been shown to increase correct recall with different types of interviewees, of different ages and in different countries, namely, the UK, United States, Canada, Germany, France and Spain (Milne and Shaw, 1999:131).

8 INTERVIEWING CHILDREN IN SEXUAL ABUSE CASES

In view of the need to minimise both false allegations and false denials of child sexual abuse, the importance of conducting adequate interviews of children cannot be overemphasised (see Bull, 1995ab; Lamb et al., 1995). It is imperative that the interviewer in such cases has adequate knowledge of sexual development, the numerous ways in which children can be sexually abused, 'as well as specialist knowledge

The importance of conducting adequate interviews of children cannot be overemphasised.

to interact appropriately and sensitively with them' (Yuille et al., 1993:98). Yuille et al. recommend that, if an interviewer has concerns about the suggestibility of a child, he/she should ask a few questions about irrelevant issues before concluding the interview in order to decide whether the interviewee's answers can be relied upon.

In their *amicus* brief in the *Michaels* case, Bruck and Ceci (1995:309) concluded that the following reduce the risks of suggestibility effects:

- a child's report after a single interview rather than after multiple interviews
- asking a child non-leading questions
- the interviewer not having a confirmatory bias, that is, not blindly following only one hypothesis
- not repeating closed-ended yes/no questions during the same or different interviews with a child
- if the interviewer is patient, non-judgemental and does not try to create demand characteristics, in other words, does not in any way, subtle or otherwise, bias a child to answer a question in a particular way.

Yuille et al. (1993:99–100) advocate using their method known as the 'Step-wise Interview'. It is a non-suggestive method of interviewing which comprises a series of nine steps during the interview, and is meant to maximise recall while minimising contamination. The nine steps are:

- 1 rapport building
- 2 requesting recall of two specific events
- 3 telling the truth

- 4 introducing the topic of concern
- 5 free narrative
- 6 general questions
- 7 specific questions (if necessary)
- 8 interview aids (if necessary)
- 9 concluding the interview (from table 5.1, p. 99).

Yuille et al. also list four major goals of an investigative interview, namely:

- 1 trauma-minimisation of the investigation for the child
- 2 obtaining maximum information from the child about the alleged event/s
- 3 minimising the interview contamination effects on the child's memory for the event/s in question
- 4 maintaining the integrity of the investigative process (p. 100).

They suggest combining the step-wise method with 'Statement Validity Analysis' (see chapter 8). According to Marxsen et al. (1995), 'The step-wise protocol has been officially adopted by both police and child protection workers in many parts of Canada, the United Kingdom, and the United States' (p. 454). The Pigot (1989) Report in the UK into issues concerning children's evidence, also recommended the adoption of the step-wise interview method as a national standard.

Another systematic approach to gathering evidence in cases involving children in general and alleged sexual abuse in particular has been developed at Liverpool University in England. This particular model is known as the 'Systematic Approach to Gathering Evidence' (SAGE) and has been developed in response to such events in the UK as the Cleveland Inquiry and reforms regarding children's evidence introduced by the *Criminal Justice Act 1991*. SAGE has been tested in family courts (Roberts and Glasgow, 1993:10). SAGE has the following six aims:

- 1 to make decision making explicit and to encourage investigators to 'opt in' to particular actions and behaviours
- 2 to provide the investigation with a structure and to make clear to investigators the relevant information they need to collect
- 3 to encourage communication about the child's world – experiences, significant others and abilities – not only about allegations of abuse
- 4 to provide testing of the child's competence and to encourage accuracy within the process of the investigation
- 5 to facilitate professional 'working together', providing practical ways of expediting this process and to provide a context of training
- 6 to investigate alleged experience of child sexual abuse within a single-case methodology framework (p. 10).

SAGE aims to compare and contrast the child's response to stimuli presented in a series of planned and controlled brief sessions. As Roberts and Glasgow (1993)

acknowledge, however, ‘the most common criticism of SAGE is that it takes longer [several brief sessions, often no longer than 30 minutes each] than the “one or at most two” interviews recommended in the *Cleveland Report*’. There is undoubtedly a need for evaluation studies of the comparative strengths and weaknesses of interview methods such as step-wise and SAGE in forensically relevant contexts.

A procedure for assisting children to understand what is being asked of them in investigative interviews, known as ‘felt board’, was devised by Poole (1992). It entails drawing on the ‘felt board’ the outline of an adult’s head and a child’s head, the child’s head containing a fair number of felt triangles of a different colour from the felt board. The interviewer explains to the child that the triangles in his/her head stand for all that the child knows about the matter at hand. As the interview proceeds and the child passes on information about the incident, triangles are moved from the outline of the child’s head to the interviewer’s sketched head. Poole (1992) and Sattar and Bull (1994) found this procedure resulted in children giving longer (but no more accurate) responses. In addition, Poole (1992) also found that a child’s recall is facilitated if an audio tape of a child’s first attempt at remembering is played back to that child.

Of course, whichever interviewing method one chooses to use, it is important that: (a) the interviewer is not wearing a police uniform, for example (Tobey and Goodman, 1992), and provides social support for the child by smiling and verbally acknowledging the child’s contribution (Goodman et al., 1991); (b) in the initial pre-substantive part of the interview the interviewer establishes rapport with the child; and (c) open-ended questions are used both in the pre-substantive part to encourage/train the child in providing a free narrative account as well as in the substantive part because it is well established that open-ended questions yield significantly more detailed answers (Sternberg et al., 1997), making minimum use of suggestive or closed or multiple-choice questions. In due course, of course, specific questions can be asked in order to clarify (Home Office, 2002). Unfortunately, despite the availability of official guidelines and training in how to best interview children, studies of forensic interviews in the US, Israel, Sweden and Norway show that interviewers tend to apply not-recommended questioning strategies (Thorensen et al., 2006:630). The Norwegian experience with police interviews of children during 1982–2005 indicates that interviewer strategies have improved over time and interviewers are more likely to use cued recall questions over time rather than open-ended questions.

9 BODY MAPS AND INTERVIEWING CHILDREN

New Zealand researchers Wilcock et al. (2006) investigated in two experiments 5- and 6-year old children’s ability to use body maps to show where they were touched. Children were interviewed immediately or after a delay. They found that children’s reports of the contrived incident were incomplete and inaccurate, concluded that

body maps do not facilitate children's reports, and advise against the use of body maps in clinical or legal interviews with 5- or 6-year olds.

10 ANATOMICAL DOLLS AND INTERVIEWING CHILDREN

Children in general and those who have been abused in particular may be experiencing such emotion when about to be interviewed that they have difficulty communicating verbally. In such cases, anatomically detailed (AD) dolls may be used to facilitate their communication. Since the late 1980s the practice of using AD dolls when interviewing children in cases of alleged sexual abuse has become very widespread (see Koocher et al., 1995, for a literature review). Morgan (1995) reported that anatomical dolls were being used in interviews in all 50 states of the United States and in many other countries. Utilising data in trial court transcripts, Mason (1991) examined 122 appellate court decisions in the United States in which expert testimony on the characteristics of sexually abused children was challenged. It was found that in seven out of nine cases that involved testimony based on interviews using AD dolls, expert testimony was not admitted on the basis that the use of AD dolls was not scientifically accepted (pp. 195–7). Given the controversy surrounding this practice, what can be said about it on the basis of the existing literature? The general consensus of opinion is that first of all professionals must be trained in the use of AD dolls as an aid in child interviews about child sexual abuse. The interviewer should also establish initial rapport with the child before presenting a clothed doll. There is evidence that this is the practice followed by most professionals who use AD dolls and that most children aged 3–6 undress dolls spontaneously or with little encouragement from an adult (Glaser and Collins, 1989). Not forgetting that at about the age of 5 children are more likely to be able to communicate about (that is, name) body parts (Schor and Sivan, 1989), interviewers would be well advised not to give children the names of body parts or to suggest functions for them (*American Professional Society on the Abuse of Children [APSAC] Guidelines*, 1990).⁶⁷

One crucial question is whether the use of AD dolls as demonstration/memory aid/diagnostic tools leads young children to make false allegations of sexual abuse (see DeLoache, 1995). Some authors⁶⁸ have argued that using AD dolls, especially with preschoolers, increases children's suggestibility. Boat and Everson (1993:56–9), however, cite a number of studies⁶⁹ that appear to allay this concern. Saywitz et al. (1991a) used free recall, AD dolls and direct and misleading questions to investigate the memories of non-refereed 5–7-year-old girls a week after experiencing a medical checkup by a paediatrician that involved medical touch. It was found that not only does the use of dolls not stimulate false reports of genital contact but it also helps children to remember more information about the event. However, since children younger than 5 years of age are known to be more suggestible, the results of Saywitz et al. (1991a) cannot be generalised to younger

Professionals who interview children about child sexual abuse must be trained in the proper use of AD dolls as an aid to recall.

children. On the basis of their literature review, Koocher et al. (1995) concluded that ‘research to date mainly supports use of AD dolls as a communication or memory aid for children 5 years or older, albeit with a certain risk of contributing to some children’s errors if misleading questions are used’ (p. 217).

Bruck and Ceci (1995) speak for most authors in this area when they state that because AD dolls are suggestive and because one cannot draw definitive conclusions about whether or not children have been sexually abused on the basis of how they play with such dolls, ‘The use of anatomically detailed dolls has raised skepticism . . . among researchers and professionals’ (p. 290). Those professionals who prefer to err on the side of caution should heed Yuille et al.’s (1993:109) advice that AD dolls ‘are to be used only after the child has disclosed details of the abuse. The dolls should never be used to obtain the disclosure, only to clarify it.’ Extreme caution in the use of AD dolls in legal contexts is also urged by Skinner and Berry (1993) on the basis of their literature review. DeLoache (1995) argues convincingly against the use of dolls with children 3 years of age or younger. On the basis of their review of the literature, Pipe et al. (2002) state that dolls should not be used with children aged 5 years or less because they ‘fail to substantially increase the correct information that children report’ (pp. 165–6). Pipe et al. conclude the same about the use of any toys. Finally, whether or not AD dolls are used in child sexual abuse investigative interviews, one cannot but agree with McGough (1995) that, while the law in the United States (and in other common law countries) does not require it, it is imperative that such interviews be videotaped. Such a practice will help to improve ‘the quality of the child abuse investigations, the reliability of child witness testimony, and ultimately the justice of the American [and other countries’] civil trial’ (p. 386).⁷⁰ Finally, as far as the use of photographs is concerned, Pipe et al. (2002)⁷¹ cites empirical evidence⁷² that photographs can be effective retrieval cues in interviewing children, following both short and long delays (see also chapter 9).

CONCLUSIONS

Advances in legislation since the early 1980s in the United States, the UK, Canada, Australia, New Zealand and Scandinavia have significantly improved how child witnesses are interviewed and their testimony presented in court. However, a great deal of work remains to be done. Also, let us not forget that for child witnesses in South America, Africa and Asia legal reforms of the kind referred to in this chapter are unheard of. The empirical evidence considered in this chapter shows there is no justification for considering children incompetent as witnesses by virtue of their age. Edelstein et al. (2002) conclude their discussion of the effects of legal involvement on children, by stating that the available research evidence leaves no doubt that children who are interviewed as victims of or as eyewitnesses to crimes and wait to appear in court to testify, may very well find those experiences stressful (p. 269). In order to improve children’s testimony at both the investigation and trial stage it

It is not advisable that AD dolls be used as an interview tool with children aged 5 or less and, generally, such interviews should be videotaped.

is important that we bear in mind that they are vulnerable by virtue of their age, and we need to acknowledge their perceptions and fears about being interviewed as well as going to court, and that children should be prepared and adequately supported to cope well with a variety of stressors (see Spencer and Flin, 1993:364) during the pre-trial stage, the court experience and the post-trial stage. Such support (see Westcott, 2008, for a review) is essential in order to reduce attrition in criminal cases involving child witnesses as well as to increase the likelihood of the child's testimony contributing significantly to the conviction of the defendant. According to Westcott (2008), evaluations of child witness support schemes, including evaluations of the preparation and support received by young witnesses (Plotnikoff and Woolfson, 1995, 2004), have been positive. One cannot but agree with Helen Westcott that only by achieving substantive equality between the defendant and the witness and by being 'prepared to challenge conventional priorities in order to achieve this goal' shall we be able to safeguard vulnerable individuals (p. 203).

It is also imperative that those who are tasked with interviewing child witnesses do so competently, utilising such interview methods as the Cognitive Interview and official guidance provided, for example, in *Achieving Best Evidence in Criminal Proceedings*. Research attention should be focused on elucidating jurors', judicial officers' and police officers' perceptions of children's and adolescents' credibility as eyewitnesses as well as identifying children's strengths and weaknesses and how they are treated by the legal system, the legal agents and other professionals who interact with child witnesses.

There is a need for police personnel, lawyers and judicial officers to communicate with children in age-appropriate language. In view of the increasing number of children testifying in courts, relevant psychological knowledge should inform police, legal and judicial training as well as other professionals (for example, child protective services workers) whose work involves them in interviewing children in the context of abuse allegations having been made. As Doris et al. (1995) pointed out, however, implementing a training program for such professionals does not of itself mean they become competent interviewers. Similarly, reforming legislation is simply not enough. As Flin (1993:296) reminds us, however, closed-circuit television can save a child the trauma of having to confront an offender in court face-to-face but it does nothing about long pre-trial delays, the use of inappropriate language by lawyers in communicating with children (see Walker, 1993; Wilson, 1995), the cross-examination of a child by a lawyer who aims to intimidate and discredit a child as a witness (Westcott, 1995) or, finally, preventing the defendant or his/her associates intimidating a child in the environs of the courthouse. It is interesting to note in this context that one of the recommendations by Judge Pigot's committee was for a specialist child examiner to interview the child on behalf of both parties and for the benefit of the court. It was the representative of the bar who dissented from that suggestion (Flin, 1993:296).

As far as the use of AD dolls in child sexual abuse assessments is concerned, they can be a useful communication aid when used by an adequately trained professional interviewer with children of 5 years of age or older and such interviews

should be videotaped. The legal system in western English-speaking common law countries can create a better socio-legal context for children's testimony by adopting some features of inquisitorial legal systems on mainland Europe, such as court-appointed child examiners (see Köhnken, 2002). The need for innovation when it comes to hearing and testing children's evidence on both sides of the Atlantic and in the Antipodes is long overdue. Such reforms should utilise both top-down and bottom-up solutions. Meanwhile some researchers have examined the importance in children's identification accuracy of children's secrets (see Pipe and Goodman, 1991), multiple interviewing (Davies, 1994:179) and ways judges regulate the questioning of children in court by lawyers (Carson, 1995c). For many other researchers the behaviour of jurors and juries, the concern of the next chapter, continues to be the focus of their attention. Research into juridic decision-making is another pillar on which the edifice of legal psychology has been built.

REVISION QUESTIONS

- 1 How has the legal status of children as eyewitnesses improved in western common law countries?
- 2 How effective is closed-circuit television in protecting a child victim of sexual abuse when testifying in a trial?
- 3 How valid are popular beliefs about children as eyewitnesses?
- 4 What do you know about the memory performance of preschoolers?
- 5 What factors impact adversely on the accuracy of children's memory of an event?
- 6 What does the empirical evidence indicate about implanting false information in children?
- 7 Under what circumstances are children as good eyewitnesses as adults?
- 8 How effective is the cognitive interview in enhancing the accuracy and completeness of children's testimony?
- 9 What are some of the dangers in interviewing children in cases of alleged child sexual abuse? How can they be avoided? In particular, in a forensic context, how should a child be interviewed to reduce the risk of suggestibility?
- 10 What support do abused children require at the pre-trial, trial and post-trial stage?

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5 THE JURY

CHAPTER OUTLINE

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No freeman shall be seized, or imprisoned, or disposed or outlawed, or in any way destroyed; nor will we condemn him, nor will we commit him to prison, excepting by the lawful judgement of his peers, or by the law of the land.

(Clause 39, *Magna Carta* 1215)

A better instrument could scarcely be imagined for achieving uncertainty, capriciousness, lack of uniformity, disregard of former decisions – utter unpredictability.

(Judge Jerome Frank, 1949:172)

In short, contrary to the worst fears, scientific [jury] selection procedures cannot reliably tip the scales of justice.

(Kassin and Wrightsman, 1988:61)

INTRODUCTION

In *The Book of Magna Carta*, Hindley¹ (1990:ix–x) comments that the words in the above quotation from clause 39, which has been the basis for the institution of trial by jury, ‘coined by a distant society in a half-forgotten language, have been treasured by generations of men and women in the English-speaking world as a safeguard of individual liberty’. Darbyshire (1991:742), however, reminds us that, contrary to popular belief, legal historians (for example, Holdsworth, 1903:59) have pointed out (but have gone largely unnoticed by students of the jury) that clause 39 has nothing to do with trial by jury. The notion of being tried by one’s peers existed long before the *Magna Carta*. The conclusion reached in the pages that follow is that the weight of the evidence from both experimental simulation and studies of actual juries/jurors is that the jury system in western English-speaking common law countries has been in decline and is not a reliable, sound method of determining whether a defendant is guilty or innocent. In view of the fact that the jury has great symbolic significance, especially due to its nullification right (see below), it is highly unlikely to be abolished in the foreseeable future, and so a number of reforms are suggested to improve jury decision-making. While the focus in this chapter is primarily on the psycholegal implications of jury research, some background information is necessary in order to place the issues considered in a broader context.²

The notion of being tried by one’s peers existed long before the *Magna Carta* in 1215. It was invented in ancient Athens.

1 A JURY OF TWELVE: HISTORICAL BACKGROUND

An early documented example of a system of jury existed in ancient Egypt 4000 years ago (Moore, 1973).³ However, the idea and ‘The right to trial by a jury of ordinary citizens (not persons having any special position or expertise) . . . It was in Athens that it was invented’ (McDowell, 1978:34). Allotting jurors by lottery and the number of jurors used meant that ‘An Athenian jury was the Athenian people’ (p. 40). From ancient Greece the concept of a jury was adopted across Europe in one form or another and was introduced to Britain in the middle of the eleventh century by the Normans (Kerr, 1987:64).⁴ Trial by ordeal was abolished by the Pope in 1215 and the idea of 12 jurors developed over many centuries (Cockburn and Green, 1988; New South Wales Law Reform Commission [NSWLRC], 1985:14). According to Lind (1995), the idea that the jury should comprise 12 persons, an essential feature of English common law, was passed on to the Anglo-Saxons by the Vikings; it was upheld in the United States in *Patton v. United States*, 281 US 276 (1930). The requirement that a jury’s verdict be unanimous was established in 1367. The Privy Council, sitting in the Star Chamber, heard offences for which the common law provided no remedy; in fact, redress for printed libel could only be obtained in the Star Chamber (Denning, 1982:163), which also heard cases of immense importance to the Crown, including high treason cases in which the jury had acquitted. The Star Chamber could not impose the death penalty but could impose such other barbaric forms of punishment as pillory, whipping, loss

of ears and stigmata on the face. The Star Chamber was abolished in 1621. In fact, until 1670 juries were often fined or even imprisoned if their verdict was not what the judge thought it should be (Clarke, 2000:40). According to Lord Denning (1982:37–8), in order to ensure jury unanimity judges would keep juries who retired to deliberate ‘without food, heat or light’ and, not surprisingly, perhaps, some jurors were caught with apples in their pockets (p. 168)!

Unanimity of jury verdicts was reiterated by the US Supreme Court in *Patton v. United States* (1930) 231 US 276, as a basic requirement of the American jury. However, four decades later, the decision in *Johnson v. Louisiana* 32 L.Ed.2d 152 (1972) introduced majority verdicts in non-capital felony cases and in *Burch v. Louisiana* 441 US 130 (1979) it was stated that six-person juries must be unanimous. According to King (2000), Louisiana and Oregon permit non-unanimous verdicts in felony cases. Regarding jury eligibility, there have always been qualifications of every man to serve on a jury: originally, the requirement was to be a freeholder; it became a householder in the nineteenth century and, following a recommendation by a Committee⁵ chaired by Lord Morris of Borth-Y-Gest, the *Juries Act 1974* changed the qualification for jury service to eligibility to vote at an election of a member of Parliament and, thus, ‘jury vetting’ to exclude persons with a criminal record became possible. A property qualification for jury service in Northern Ireland excluded a substantial proportion of its citizens, especially women, from jury duty until it was abolished in 1976 (Quinn, 1999).⁶ Similarly, in Australia, too, it was not until relatively recently that women and Indigenous peoples, for example, became eligible for jury service (NSWLRC, 1985:16). In Australia juries of 12 ordinary citizens were introduced first by the Supreme Court of NSW in 1833. Section 80 of the Constitution of the Commonwealth of Australia provides for jury trial on indictment of any offence against any law of the Commonwealth and, furthermore, every such trial should be held in the state or territory where the offence was committed (p. 31). Interestingly, Australia also has coronial inquiry juries, similar to a grand jury, that examine suspicious deaths by determining whether there is sufficient evidence to warrant criminal prosecution (see Waechter, 1997). In western common law jurisdictions with a jury system the qualification for jury service is frequently: (a) being on the electoral role;⁷ and/or (b) being a licensed driver; and/or (c) not coming under any of the categories of disqualified or ineligible persons detailed in statutory provisions.

1 THE NOTION OF AN IMPARTIAL AND FAIR JURY: A CRITICAL APPRAISAL

Many civil law countries (for example, Israel, Spain, the Netherlands) have no community participation in the guilt-determining process in serious criminal matters. Those common law and civil law countries that have a jury system differ regarding various aspects of their jury system (Osner et al., 1993; Kaplan and Martin, 2006a). Such differences pertain to whether, for example, the number of possible verdicts

is two ('guilty', 'not guilty') or, three, as in Scotland⁸ ('guilty', 'not guilty' and 'not proven'); the jury comprises 12 members (as is the case in England and Wales, the United States, NZ, Australia and Canada) or more (15 in Scotland); a jury comprises just laypersons (as in England and Wales, the United States, New Zealand, Australia and Canada) or a combination of laypersons and judges (as in Denmark, Belgium, France, Italy, Germany, Sweden, Poland, Russia⁹ and Japan) and the types of legal cases they decide; the permissible age for jurors (for example, it is 18–65 in England but 20–65 in New Zealand, while in Australia there is no upper age-limit); how lists of potential jurors are compiled;¹⁰ who is disqualified from or is ineligible for jury service;¹¹ whether peremptory challenges¹² are allowed; the categories of individuals who can be excused from service as of right, and, finally, how many peremptory challenges¹³ are allowed (5–20 in the United States, not available in England, 3–5 for both sides in Australia) and how many challenges for cause are allowed each side at a trial (see below). Of course, the methods by which people eligible for jury service are summoned and the criteria used to excuse some of them affect their representativeness. Airs and Shaw (1999), for example, reported that in England and Wales, members of ethnic minorities, those aged 20–24 years and those living in rented accommodation were less likely to be registered voters. They also found that a significant proportion (38 per cent) of potential jurors were excused for various reasons and, at the end of the day, only 34 per cent were available to serve on a jury. Other important features of different jury systems¹⁴ are what information about potential jurors is divulged in court for either side to challenge (in England a lawyer knows only a potential juror's name and, therefore, unlike in the United States, the scope for 'choosing' jurors is very limited – but see below for a judge's ruling that changes this), and whether a judge has discretion to exclude a juror even without a challenge having been made (as is the position in England and Wales, Buxton, 1990a, 1990b). In contrast to the United States, in England, Scotland, Australia and New Zealand opposing counsels have little opportunity to affect the composition of the jury and, consequently, 'scientific jury selection' is not a lucrative business for trial consultants. Being selected for jury service is a very different process in Germany than in England, Australia or the United States. A stratified list of persons from the community at large is compiled and sent to the court. According to Hertel et al. (2002)¹⁵ in Germany jurors are assigned to different courts and serve for four years with a maximum of 12 days a year. It is, therefore, possible for jurors to serve on more than one jury in the course of a day (see also Bliesener, 2006). In addition, the size of the jury varies between different countries and often depends on whether it is a civil or a criminal trial.

While the public in western common law countries is well accustomed to 12-member juries for criminal trials, the number of laypersons sitting with judges to decide serious criminal matters varies between civil law countries: in France, nine jurors deliberate with three judges; in Italy six lay assessors sit with two judges; in Germany three career judges adjudicate with lay judges; and in Sweden one professional judge sits with three lay judges (Osner et al, 1993). While some jurisdictions require a unanimous verdict others are content with a majority one.

Furthermore, the majority required may be ten to two (England) or a bare majority such as even eight to seven in Scotland, where the size of the majority is never announced in court by the foreperson in order to retain the confidentiality of jury room deliberations (Duff, 1999). Some other differences are whether there is a requirement that a jury be segregated once it has commenced its deliberations¹⁶ and whether the judge sums up to the jury on the facts (as happens in England and Wales, though not in the United States [Evans, 1995:95]). A crucial characteristic of some jury systems is that a jury's verdict is final while in others it is merely a recommendation to the judge, as in some parts of the United States. Finally, in some jurisdictions it is prohibited to interview jurors after a trial has been completed, as is the position in England¹⁷ and in Australia, but this is not so in the United States where limited access to the deliberations of real juries was allowed in the context of the Arizona Jury Project in order to study changes to Arizona's civil procedures (Diamond et al., 2003). Such differences between jurisdictions mean that one should not generalise findings about juror decision-making across jurisdictions without question. In addition to its symbolic importance for so many countries worldwide and the fact that jury trials are generally for serious criminal offences, it is clear that the jury system varies significantly across jurisdictions in terms of responsibility, size, verdict and votes. Despite its great significance for so many people, it has been said that the jury is 'probably the least understood branch of our system of government' (Krauss, Stanton, 1995:921). Drawing in part on Darbyshire (1991) concerning the very concept of the jury, let us next take a close and critical look at the jury, this 'quaint institution that reflects the apotheosis of amateurism' (Blom-Cooper, 1974).

The very concept of the jury itself is problematic because trial by one's 'peers', 'representativeness' and 'impartiality' do not go together and, even if they did, they would not guarantee that a jury's verdict would be a fair one.

A thorough dissection of the jury idea¹⁸ reveals that, sentimental attachments aside, the very concept of the jury itself is problematic and a strong case can be made for at least drastically reforming the jury system in western common law countries. To begin with, as already mentioned above, trial by one's peers is not provided in clause 39 of the *Magna Carta* itself. The fact is the Latin words '*judicium parium* do not refer to a trial by jury', *judicium* 'implies the decision of a judge, not a jury verdict',¹⁹ and *liber homo* (translated as 'freeman' or 'freeholder') 'did not mean what it does today' and 'we should remember from school history, freemen were a limited class in the feudal system' (p. 743). Thus, the long-held belief by legal scholars (for example, Blackstone, 1776; Devlin, 1956) that *judicium parium* referred to trial by one's peers is based on a misconception (Forsyth, 1852:108). It has also been pointed out that one cannot assert, in jurisprudential terms, that there is a right to jury trial (Darbyshire, 1991:743). The Sixth Amendment of the Constitution of the United States guarantees defendants the right to a jury trial if they are charged with serious offences, which are usually defined as those carrying a possible sentence of more than six months' imprisonment.²⁰ The simple truth is that many criminal defendants charged with indictable offences/felonies simply do not have the choice of being tried by a magistrate/judge alone – they have to be tried by judge and jury.

The view that it is desirable to be tried by one's 'peers' is based on the argument that: (a) it is good to be tried by a group of individuals who are representative of one's community; and (b) that 'representativeness' makes for impartial, objective, just and fair jury verdicts. Marshall (1975) has argued that 'the right to trial by an impartial jury' is not an ideal that can be achieved because trial by one's 'peers', 'representativeness' and 'impartiality' do not go together and, even if they did, they would not guarantee that a jury's verdict would be a fair one. For example, fairness and impartiality may not be a feature of the general public which the jury represents (see Rosen, 1992).²¹

Such arguments, however, are unlikely to be taken seriously by staunch supporters of the jury. According to Cammack (1995:407), in the United States, historically, the jury has symbolised and embodied American democracy and the power of ordinary citizens to resist what they perceive to be abuses of government; in fact, the Supreme Court in *Powers v. Ohio*, 499 US 400, 407 (1991) stated that, 'jury service is second only to voting in the implementation of participatory government' (p. 483) and the right to an 'impartial jury' in criminal cases is explicitly guaranteed in the Sixth Amendment (p. 428). In *Wainwright v. Witt* 469 US at 423 (1985) the Supreme Court provided a definition of a constitutionally impartial juror as someone 'who will conscientiously apply the law and find the facts' (Cammack, 1995:458). Finally, the Supreme Court stated clearly in *Holland v. Illinois* 493 US at 482 (1990) that the constitutional requirement of juror impartiality is to be achieved by means of peremptory challenges (p. 447) but these are not to be exercised on the basis of the juror's sex (*J.E.B. v. Alabama ex rel.T.B.* 114 S.Ct 1419 (1994) or race (*Batson v. Kentucky* 476 US 79 [1986] because to do so violates the Equal Protection Clause of the Fourteenth Amendment (p. 406). Cammack maintains that definitions of juror impartiality, as provided by the Supreme Court, have their origin in and reflect the mind-body dualism of the Enlightenment, the belief that fundamentally we can distinguish the subjective mind from the objective world and that, because there exists neutral objective reality, truth is something objective – beliefs that have been seriously questioned in linguistics, cognitive psychology and sociology (pp. 410, 463–6). As for the crucial term 'trial by one's peers', its meaning is by no means clear for the Indigenous peoples of the United States, Canada, Australia and New Zealand (Antonio and Hans, 2001; Dunstan et al., 1995; Fukurai et al., 1993; Israel, 1998; New Zealand Law Commission, 2001). According to Fukurai et al., the fact that minorities are disproportionately represented on juries poses a serious challenge to the jury system. Antonio and Hans (2001:71) list a number of arguments that can be advanced in favour of a diverse jury, namely:

- it would facilitate discussion and generate unique ideas
- it would reduce the manifestation of prejudice
- it would reduce the likelihood of stereotypical judgements by jurors.

In the final analysis, of course, a verdict by a racially representative jury is more likely to be accepted by the public at large. In England, s.321 of the *Criminal Justice Act 2003* removed certain categories of persons from those who were

previously ineligible for jury service (for example, judiciary and others concerned with the administration of justice) and others stopped to be eligible for excusals (for example, members of parliament and medical practitioners). The result has been an increase in the number of jurors with public service and professional commitments, placing greater demand on judges to adjourn a trial, discharge or excuse a juror.²² In order to provide a sufficient backdrop for the discussion of empirical studies that follows pertaining to a broad range of jury controversies, let us also consider what defenders and critics of the jury have said about it.

The arguments in favour for and against the jury listed below make it clear that there are two conflicting views of what the function of the jury ought to be.

Arguments Against and for the Jury

The following is a list of arguments against jury trials.

- In England, Scotland, Australia and New Zealand the right to trial by jury is not enshrined in a constitution.²³
- Trial by jury is not the cornerstone of the criminal justice system.²⁴
- Juries are not representative of the wider community.²⁵
- Most of those eligible for jury service will never have the experience.²⁶
- In some jurisdictions jury trial is very nearly extinct.²⁷
- A jury does not give reasons nor is it accountable for its verdict.²⁸
- A jury deliberates in secret.
- A jury establishes no precedent.²⁹
- Juries are unpredictable.
- To all intents and purposes, a jury verdict is final.
- A significant number of jury trials end up in mistrials.³⁰
- In a significant number of trials there is a hung jury.³¹
- Compared to a judge-alone trial, a jury trial is costly and time-consuming.³²
- Some jury verdicts reflect jurors' emotional involvement rather than rational decision-making.³³
- A jury can be interfered with.³⁴
- Non-legal factors such as inadmissible evidence and pre-trial publicity impact on jury verdicts.³⁵
- Juries are influenced by both non-legal³⁶ and legally relevant³⁷ issues and neither judicial instructions nor deliberation reduce the impact of non-legal factors.³⁸
- Often jury verdicts are the result of persuasion tempering reason.³⁹
- Many potential jurors try to avoid jury service and many of those who serve on juries report being disenchanted with the whole experience and lose confidence in the administration of justice.⁴⁰
- In England and Wales the jury does not have to wait until the defence has finished presenting its case but can acquit the accused at any time after the prosecution has finished presenting its case.⁴¹
- Jury service can be a very traumatic experience.⁴²

- Jurors often lack the ability to understand and judge a legal case adequately.⁴³
- Jurors frequently cannot remember all the relevant facts of a case.⁴⁴
- Juries acquit too readily.⁴⁵
- Juries have been shown not to defy public opinion and, by failing to identify serious weaknesses in the prosecution case, convict innocent defendants.⁴⁶
- Perverse jury verdicts are not uncommon.⁴⁷
- Any form of *voir dire* is incompatible with both randomness and representativeness.⁴⁸
- Allowing juries to rewrite the law has the potential for wrongful convictions.⁴⁹
- Changing the law is the province of parliament.⁵⁰
- Juries do not necessarily safeguard defendants' civil liberties.⁵¹
- There is no longer a need for perverse jury verdicts to counter the extreme severity of penal sanctions – thieves are no longer being sent to the gallows.⁵²
- There is no big difference in verdicts agreed between a jury of 12 and a judge deciding alone.⁵³
- The jury's task is one for professionals, not amateurs.⁵⁴

Interestingly, despite such a long list of serious criticisms against the jury, Sanborn (1993) argued that the juvenile peer jury that exists in youth courts in the United States (see Williamson et al., 1993) should be extended to all juvenile courts. In contrast to this, in England and Wales it has been suggested that the minimum age for jurors be raised to 21 years (Stone, 1990). In response to one of the criticisms of the jury system mentioned above, in England and Wales it was proposed by the *Auld Report* (2001) that juries should move more towards reasoned verdicts, using case summaries and a list of questions they must answer. The judge could require the jury to give a verdict on each question. Such reasoned verdicts are provided for in Spain and Russia, for example (see Martin and Kaplan, 2006, for details).

CASE STUDY

Examples of alarming jury verdicts and juror behaviour

According to Kassin and Wrightsman (1988:99), 11 members of a jury in the United States believed that a person could be possessed by the devil. Not surprisingly, therefore, they accepted the defence of demonic possession! In a case in Britain, *Stephen Young* [1988] 1 WLR 43021, a jury found the defendant guilty of murder. However, the conviction 'was set aside when it was discovered that four jury members had been influenced by a séance they had conducted in order to receive a post-humous message from the victim' (McEwan, 2000:113).

The following are arguments in favour of jury trials.

- Jury service is an important civic experience.
- Jurors discharge their duty with a strong sense of responsibility.⁵⁵
- A decision by a jury of one's peers is more acceptable to most defendants than the decision of a single judge.
- It adds to the legitimacy of government authority.⁵⁶
- It counterbalances the special interests of judges.⁵⁷
- The jury is an antidote to tyranny.⁵⁸
- Twelve heads are better than one.
- Unlike an experienced judge, a jury brings a fresh perception to each trial.
- Jurors make up in commonsense and experience what they do not possess in professional knowledge and training.
- Jurors are interpreters of trial information and not passive recipients of evidence.⁵⁹
- Experts do not dominate jurors' opinions.⁶⁰
- Jurors generally stick to the evidence and are not swayed by irrelevant considerations.⁶¹
- It is not true that juries take too long to reach a verdict.⁶²
- Jury deliberations significantly reduce any undesirable idiosyncrasies of individual jurors.
- Jurors are suitable to decide complex legal cases.⁶³
- Jury damages awards are not biased against businesses and high-status defendants.⁶⁴
- Unlike a judge, a jury can counter strict and unfair legal rules by deviating from them, motivated by its own social and ethical standards.⁶⁵
- A jury individualises the administration of justice.⁶⁶
- Juries act as catalysts for legal reform.
- A jury can ignore a judge's direction to acquit the defendant.⁶⁷
- Whether a jury's verdict is 'perverse' depends on whose opinion is sought.⁶⁸
- Most jury trial protagonists believe the jury system is a 'good system'.⁶⁹
- A significant proportion of people who have attended for jury service have confidence in the jury system.⁷⁰

The arguments in favour of and against the jury listed above make it clear that there are two conflicting views of what the function of the jury ought to be: (a) to return a 'correct verdict' applying the law and on the basis of the facts before the jury; and (b) to go beyond the law and the facts of the case and to mediate 'between the law and community values' (Jackson, 1996:327). Defenders of the jury in the UK (Harman and Griffith, 1979) have pointed with great concern to the onslaught on the jury in the form, for example, of the abolition of unanimous verdicts (1978), restrictions of the right to question jurors (1973), restriction on the cases to be tried by the jury (1977), restricting the right of defence counsel to challenge jurors (1977), as well as the legitimisation of jury vetting (1978).

In the light of so many, and often conflicting and entrenched, views held by both advocates and critics of the jury system, it would seem that no amount of research evidence as to how juries behave in real life or how they compare with judges or some other tribunal will resolve the jury controversy. Findings by psychological researchers may abound but in the end important value judgements remain to be made. One thing is certain: the jury trial on both sides of the Atlantic and in Australia may well undergo further reforms (see below) but it will be with us for a long time to come. Its abolition 'will come only after long reflection and in the context of a complete overhaul of the administration of criminal justice' (Blom-Cooper, 1974).

Jury verdicts impact not only on individual criminal and civil defendants but can also have a significant effect on a whole community as when, for example, at the end of the Rodney King trial in Los Angeles the jury's verdict triggered riots. As Levine (1992) reminded us, the jury is a political institution, a jury verdict can also have dire economic consequences for companies made to pay large amounts in damages, can ruin a political party's popularity by finding a leading politician guilty and, finally, a jury's decision can send a strong message to a community regarding what behaviour is tolerated.

Since the Chicago Jury Project of the 1950s (Kalven and Zeisel, 1966; also see below) stimulated renewed interest in the study of trial procedures and jury performances (Davis, 1989), the jury has been a very popular research topic for psychologists. Kadane (1993:234), however, draws attention to the fact that psychologists have devoted a disproportionate amount of time to studying juries and have neglected a host of other decisions in the criminal justice system, such as the decision to report a crime; the police deciding to record what has been reported; the police deciding to use their firearms; to stop and search someone; to arrest them; deciding what to charge them with plea-bargaining decision-making processes and so forth, which impact on a far greater number of individuals within most western societies than do jury decisions. Furthermore, Lloyd-Bostock (1996) has pointed out that 'the field has been dominated by research on the jury in the United States. Its relevance to the jury in Britain and elsewhere cannot be taken for granted' (p. 349). Echoing the same view more recently, Kaplan and Martin (2006b:2) remind their readers that differences in cultural norms and trial procedures mean 'large gaps' remain in extrapolating empirical findings from jury research in North America.

The fact is that the great majority of legal cases are not decided by juries but by tribunals, magistrates' courts,⁷¹ judges sitting alone, and most criminal defendants plead guilty while most civil cases are settled outside courts (Baldwin and McConville, 1979; Hans, 1992:56; Willis, 1983). It should also be noted in this context, that as judicial discretion at the sentencing stage is reduced (see chapter 6) and sentences become more predictable, the scope for prosecutorial discretion increases as does the practice of plea-bargaining, thus reducing the importance of jury trials even further. In this chapter an attempt will be made to show that

the jury's symbolic importance far outweighs its practical significance, that systematic jury selection is conceptually problematic and does not appear to be as 'scientific' as its advocates would have us believe and, finally, that there exists a strong case for reforming the jury as it exists on both sides of the Atlantic and in Australia and New Zealand in both a legal and psycholegal sense. On the basis of the available behavioural research into jurors and juries some authors have argued that there is already a substantial body of knowledge relevant to attempts to improve the jury system (Pennington and Hastie, 1990).

Of course, as Hastie (1993b:6–10) and Hans (1992:56–8) point out, there are very good reasons for the popularity of jury studies, namely, the very nature of jury cases, the fact that the jury's task is clear, it appeals not only to cognitive psychologists interested in higher processes but also to psychologists with other interests because of the symbolic importance and actual impact of jury decisions on people and, last but not least, because 'research on jury decisions can be profitable' (Hastie, 1993b:10). The practice of jury consulting firms, retained by wealthy defendants and their defence attorneys to construct ideal profiles of jurors who would be favourable or opposed to a defendant to be used to reject jurors during *voir dire* (a largely American phenomenon), can be criticised as being unethical. As Brigham (2006:21–2) rightly argues, if scientific jury selection (see below) is not effective, then trial consultants are being unethical by being paid for providing an ineffective service while claiming their service is effective; on the other hand, if it is effective, it can be considered a 'high-tech way of jury-rigging'. Furthermore, as argued in this chapter, scientific jury selection is incompatible with and erodes the very notion of a fair trial by a jury that is a microcosm of the community at large.

3 METHODS FOR STUDYING JURIES/JURORS

Research into jury verdicts and individual jurors has been bedevilled by the apparently insurmountable difficulty that there is no consensus about what constitutes a 'good juror' or a 'good verdict' (Cammack, 1995; Mungham and Bankowski, 1976). This fact has not prevented jury/juror research becoming one of the most popular topics for psycholegal researchers since the mid-1970s. Devine et al. (2001) used computer-assisted searches of several databases (for example, Lexis, Nexis, PsycInfo), manual searches through eight well-known journals (albeit only American) for the previous 10 years or more and, finally, they consulted the reference lists of recent literature reviews and selected empirical studies. They identified a total of 206 studies of jury decision-making from 1955–99. We need to understand the strengths and weaknesses of different research methodologies in order to be able to interpret the validity and usefulness of psycholegal research (Kerr and Bray, 2005:328). Let us next take a look at six methods used to study juror/jury decision-making.

Archival Research

Archival research enables one to collect data on real jury verdicts and is the method used, for example, by a group of Rand Corporation researchers in the United States who analysed jury verdict reporters over a 20-year period.⁷² Two limitations of archival research are that important information of interest to a researcher may well be missing, and it is not possible to draw convincing causal inferences on the basis of such data. Of course, hypotheses developed from archival research can be tested under simulated conditions. Approximately one-fifth (19 per cent) of the empirical studies identified by Devine et al. (2001) involved analysis of archival data.

Questionnaire Surveys

The best-known study using the method of questionnaire surveys is Chicago Law School's Kalven and Zeisel's (1966) pioneering study *The American Jury* which 'was a remarkable contribution and stimulated generations of scholars to undertake empirical work on the jury' (Hans, 1995b:1233). Because of the great impact this study has had on psychological studies of juries/jurors, let us consider it in some detail.⁷³ Kalven and Zeisel sent a questionnaire to a total of 3500 judges in the United States. Of those, 555 (15.8 per cent) cooperated, providing data on 3576 trials. This oft-cited study, which provided the basis for a great deal of the jury/juror research, suffers a number of very serious limitations (Law Reform Commission of Victoria [LRCV], 1985; Pennington and Hastie, 1990; Stephenson, 1992). To illustrate, according to the LRCV, the sample of cases surveyed comprised 3 per cent out of the total number of jury trials (60 000) during the two-year period in question in the 1950s; 50 per cent of 3576 cases were provided by only 15 per cent of the judges; the reliability and validity of the study was grossly undermined by the fact that 'at first a broadly worded questionnaire was used (2385 cases), which was changed midway to a more specific questionnaire, whilst lumping them together for the findings' (LRCV, 1985:82).

Another major limitation of the same study is that judges, and not jurors themselves, were asked to assess the jurors' competence in understanding the content of a trial. The finding, that 'by and large the jury understand the facts and get the case straight' (Kalven and Zeisel, 1966:149), can only be viewed with a lot of scepticism since we would not expect a judge to admit that he/she did a very poor job of summing up for the jury before they retired to deliberate their verdict (LRCV, 1985:83). At best, Kalven and Zeisel's conclusions 'about the motivations and psychological conditions underlying individual jurors' decisions . . . must be hypothetical rather than conclusive' (Pennington and Hastie, 1990:93). It is interesting to note that even though Kalven and Zeisel also carried out post-trial juror interviews in 225 cases and, in addition, went as far as to tape actual jury deliberations in five civil cases (it was legally still possible to do so then),⁷⁴ they provide no figures on jurors' responses about what they thought of the judges'

summing up or how far the jurors were influenced by the weight of the evidence as they perceived it, instead of how they were said to have been influenced by it on the basis of what the judges who took part in the postal survey led the researchers to conclude.

Three very significant findings reported by Kalven and Zeisel were: first, the judge agreed with the jury in 75 per cent of the cases; second and, contrary to what films like *Twelve Angry Men* might lead us to believe, most jurors decide on their verdict before they retire to deliberate; and, finally, the majority view prevails. If accepted, this finding has serious policy implications, not the least in emphasising the importance of screening potential jurors during *voir dire* so as to have as many jurors as possible who will favour one's client (see below). The same finding has also led many juror researchers (see Hastie, 1993a) to concern themselves with how jurors behave before they retire to deliberate. The wisdom of so doing, however, has been challenged (see Ellsworth, 1993).

Stephenson (1992:180–2) analysed the figures on judge–jury agreement provided by the Chicago researchers and shows convincingly that the conclusion that jurors' verdicts are not significantly different from what trial judges themselves would decide is not justified. Stephenson shows that the judges in Kalven and Zeisel's study would have convicted 57 per cent of the 1083 defendants the juries would have acquitted (p. 180) and concludes that the police are apparently right in assuming that many criminal defendants should consider themselves lucky for having been tried by a jury and not by a more legally informed panel (p. 181).

Unlike in the United States, in the UK, Australia, New Zealand and Canada the function of the jury in criminal trials is confined to deciding whether a defendant is guilty. It is the judge who decides on what sentence to impose. British researchers have also reported questionnaire surveys. The Oxford study by McCabe and Purves (1972b) surveyed judges, counsel and solicitors involved in 266 contested trials and reported a rate of 12.5 per cent 'perverse acquittals', that is, cases in which the jury verdict is against the weight of the evidence. Zander's (1974) study of jury trials at the Old Bailey and the Inner London Crown Court reported that perverse acquittals comprised 6 per cent of the total. The well-known Birmingham jury study of 500 trials by Baldwin and McConville (1979) surveyed defence solicitors and judges (with a response rate of 84 per cent and 94 per cent respectively) as well as police and found that about one in four of the prosecuting solicitors and one-third of the judges were dissatisfied with the jury's verdict, with 12 per cent of such verdicts being considered as 'perverse'. The more recent questionnaire survey of jurors and other trial protagonists in Britain by Zander and Henderson (1994), however, found that the percentage of verdict acquittals considered 'surprising' varied depending on the category of respondents (see above). The same survey reported relatively high response rates except by defendants. Contrary to what the majority of American mock-jury researchers have reported (see below), Baldwin

and McConville (1979:104) found no relationship between the social composition of juries in terms of age, social class, gender and race and their verdicts, indicating that real-jury verdicts are perhaps largely unpredictable. Dunstan et al.'s (1995) assessment of the relevant literature similarly concluded that jurors' sex, age and occupation do not seem to play any important role in jury deliberations (p. 55). Negative results from studies of actual juries (see also below) challenge the external validity of a lot of mock-juror/jury studies. Finally, the last few years have witnessed a spate of long-awaited court-approved surveys of actual jurors in the United States, Australia and New Zealand and Northern Ireland (Jackson, 1996). Ryan's (2003)⁷⁵ survey in New South Wales of 2000 exiting jurors found that 75 per cent served on trials lasting less than two weeks, 49 per cent were satisfied they had contributed to the legal process, and 38 per cent considered their overall experience positive. Another survey in Australia by Horan (2004)⁷⁶ of 411 exiting jurors who served on 69 civil trials in 2001 in the State of Victoria reported higher levels of satisfaction with the jury experience than in New Zealand. Young (2003, 2004) and Ogloff et al. (2006) reported surveys of judges in New Zealand and Australia (N = 131 and 136 respectively) on communicating with jurors. It was found that more judges in New Zealand than in Australia in their opening remarks provide jurors with some discussion about the elements of the relevant substantial law and tell them of their right to ask questions during the trial. Of the 206 empirical studies surveyed by Devine et al. (2001) very few indeed used retrospective surveys.⁷⁷

Mock Juries

Mock-juror/jury studies have been the most commonly used method by students of juristic behaviour, especially in the United States, and have attracted a great deal of criticism. This method has two important advantages: (a) one can investigate a number of significant variables while controlling for extraneous influences; and (b) it allows direct access to the deliberation process. However, the use of the experimental method has attracted a great deal of criticism, especially its external validity, the relevance to actual juries of findings obtained under experimental conditions. According to Nietzel et al. (1999), during 1977–74, 89 per cent of the 265 jury studies examined criminal rather than civil trials and only 11 per cent used real juries or jurors. Furthermore, 'Generally, however, real-jury studies are not of the analytic type preferred by research psychologists (for a notable exception see Heuer and Penrod, 1994a), and they often are plagued by sampling problems, independent variable confounds, definitional and criterion variability and missing data that limit their variability (Vidmar, 1994)' (p. 28). In the literature review by Devine et al. (2001) two-thirds of the 206 studies involved mock juries. As has repeatedly been pointed out in the literature,⁷⁸ it is very difficult in a simulation study to reproduce both the court atmosphere and the legal issues as well as the responsibility involved in a jury trial, especially if expediency prevails and psychology undergraduates

are used as subjects. As McEwan (2000) points out, since we cannot interview real jurors, ‘laboratory experiments and mock trials appear to be the best alternative psychologists can adopt’ but ‘It would be dangerous to make too much of their findings’ (p. 111). Nietzel et al. (1999) acknowledge the utility of simulation research but also urge such researchers to study real juries and jurors ‘once in a while’ (p. 28). It is encouraging to note in this context that Nietzel et al.’s survey of jury studies found a significant tendency for more recent research to involve real jurors, and to be based on samples that do not use student subjects (p. 29). To illustrate, more recently in Sydney, Australia, in the *Secrets of the Jury Room* television documentary, two volunteer juries watched the same live simulated trial evidence acted in a Sydney courtroom by real barristers, expert witnesses and a judge. The jurors’ deliberations were videotaped (Russell, 2004). The two juries reached different verdicts.

Mock juror/jury studies have reported a significant amount of experimental evidence suggesting that characteristics of both the defendant and the jurors impact on jury decisions about verdict and (in the United States) severity of sentence.

Mock-juror/jury studies have reported a significant amount of experimental evidence suggesting that characteristics of both the defendant and the jurors impact on jury decisions about verdict and (in the United States) severity of sentence. Improvement in the ecological validity of experimental simulation jury research has come about in the wake of criticism of jury simulation research by both psychologists (for example, Konečni and Ebbesen, 1979, 1992; Bray and Kerr, 1982; Kerr and Bray, 2005) and judges such as Chief Justice Rehnquist in the United States in the case of *Lockhart v. McCree*, 106 S.Ct. 1758 (1986). It would be true to say that while, generally, mock-jury research is characterised by high internal validity, a lot of it appears to be short on external validity. In addition to the problem of artificiality in many jury simulation studies, Hans (1995b:1234) has criticised the almost exclusive reliance on one research method – experimental simulation. There is also the problem that jury researchers have failed to consider to what type of case or juror they want to extrapolate their experimental simulation findings (Kadane, 1993:233). This is not to suggest that the types of variables examined in mock-jury studies are irrelevant but, rather, that actual jury decision-making processes are more complex than laboratory studies low on ecological validity would seem to suggest. Mock-jury research is largely American,⁷⁹ but jury experiments were also carried out at the London School of Economics in the late 1960s and early 1970s utilising members of the public as jurors.⁸⁰ Many psycholegal researchers would agree with Kerr and Bray (2005), who maintain that authors of unrealistic jury simulations should qualify their findings and should refrain from putting them forward as the basis for policy changes (p. 358).

Shadow Juries

Given that juries deliberate in secrecy and, strictly speaking, it would be illegal to interview jurors at the end of a trial in England, McCabe and Purves (1974) of

Oxford University's Penal Research Unit, as it was then known, studied 30 'shadow juries' sitting in on actual trials. While shadow jurors' verdicts were not binding on the defendants involved, the fact that they were recruited utilising the electoral roll, that they listened to the same information being presented in the course of a trial as the real jury, and that they left the court at the same time as the real jury during *voir dire*s, means that it is the closest one could get in simulating juries. Their deliberations were, of course, recorded and transcribed, and shadow jurors were interviewed subsequently. McCabe and Purves found that the verdicts of the real and shadow jury were very similar indeed. Both shadow and real jury decided on a conviction (30 per cent) and on an acquittal (30 per cent) but shadow juries opted to convict and real juries to acquit 13 per cent and, finally, shadow juries decided to acquit but real juries to convict 7 per cent, while the remaining juries were 'hung'. While the significant similarity in verdicts between the two juries supports the validity of conclusions to be drawn from this Oxford study, according to Stephenson (1992), this shadow jury study by itself does not constitute convincing evidence that juries decide whether defendants are guilty or not consistently and reliably (p. 185). Finally, the reader should note that while field studies of jury behaviour are more realistic than experimental ones, they are limited by the fact that possible confounding variables make difficult the interpretation of their findings.

Post-Trial Juror Interviews

Post-trial interviews have been used in the United States, Australia and New Zealand to ascertain jurors' experience and understanding of judges' instructions, for example (see Adler, 1994; Bowers, 1995; Costanzo and Costanzo, 1994; Horan, 2004; Reifman et al., 1992; Ryan, 2003; Tinsley, 2001), and judges' communicating with jurors (Ogloff et al., 2006; Young, 2003, 2004). In jurisdictions such as Australia (see Cadzow, 1995), New Zealand, Canada and England it is normally against the law to interview ex-jurors and even where it is allowed (as in the United States) jurors themselves may agree not to talk about their deliberations to anybody and/or the judge may discourage jurors from speaking to journalists or researchers. In England and Wales both the Royal Commission on Criminal Justice (1993) and the *Review of the Criminal Courts of England and Wales* under the chairmanship of Lord Justice Auld (Auld Report, 2001) recommended the amendment of section 8 of the *Contempt of Court Act 1981* which prevents questions being asked about the deliberation process. Limitations of the interview method include the fact that verbal reports of mental events are often incomplete (Nisbett and Wilson, 1977) and, furthermore, people generally find it difficult to determine the effect different factors have had on their thinking processes. As Hans (1992:59) pointed out, such interviews are increasingly common but they still tend to be used with jurors in celebrated cases; jurors' memories of what was said in the retiring room is bound to be limited; different jurors may well disagree about the content of the

deliberation and, finally, publicising jury deliberations will impact adversely on actual jurors' participation and freedom of expression during deliberation. Like eyewitnesses generally, jurors' recall will normally get worse over time and be susceptible to 'contamination'; their answers may well be influenced by the 'hindsight bias' (Casper et al., 1989) and the social desirability factor. To illustrate, Doob (1977) reported that even though the great majority (97 per cent) of jurors surveyed said they had found judicial instructions easy to understand, about 25 per cent could not define 'burden of proof' and in cases where this applied half of them were unable to remember that the judge had instructed them about the defendant's criminal record. Therefore, cognitive biases and limitations of ex-jurors make it difficult to obtain an accurate record of what actually happened during deliberation (Devine et al., 2001:627).

Despite its limitations, by giving jurors a voice the interview method can be fruitful in yielding very significant findings, including revelations about phenomena not initially known, especially in terms of how jurors cope with the knowledge that they are responsible for someone's execution (Hans, 1995b:1235). Lengthy in-person interviews with capital jurors carried out by university students is the chief source of data in the national Capital Jury Project (CJP) in the United States.⁸¹ According to Bowers' (1995:1057), the objectives of the CJP have been to: (a) examine and systematically describe jurors' exercise of capital sentencing discretion; (b) identify the sources and assess the extent of arbitrariness in jurors' exercise of capital discretion; and (c) assess the efficacy of the principal forms of capital statutes in controlling arbitrariness in capital sentencing.

Books by Ex-jurors

Jurors in celebrated cases are not only constantly the object of widespread media coverage (as in the O.J. Simpson trial) but individual jurors on both sides of the Atlantic have published their experiences (see Barber and Gordon, 1976; Zerman, 1977; Burnett, 2001). The major limitation of such books is that they are about the experience of one or a few individuals in isolated cases. Nevertheless, books by ex-jurors can still provide an insight into the experience of serving on the jury.

4 WHAT DO WE KNOW ABOUT JURIES?

Literature reviews by American authors (for example, Nietzel et al., 1999) fail to include British and other European literature and are thus incomplete. This comment, however, does not apply to Devine et al. (2001). The latter authors have pointed out that, 'Because of the problem-driven nature of most research, however, no overarching theoretical model has emerged around which to structure a comprehensive review of the broad empirical literature' (p. 625).

Selecting Jurors

In England, Wales and Scotland jurors aged 18–65 are randomly selected from the electoral roll. A prospective juror must have lived in the UK for at least five years after the age of 13. People who are suffering from a serious mental disorder or have been sentenced to a term of imprisonment of five years or more are disqualified. Historically, a number of jurors could be challenged without giving any reason to the judge (peremptory challenges) and a number by giving reasons (challenge for cause). The peremptory challenge, of course, is more difficult to justify than the right to challenge jurors for cause. Sir William Blackstone, considered by Lord Denning (1982) to be ‘the greatest exponent of the common law’, argued in his *Commentaries* IV, 353, that the peremptory challenge is justified in *favorem vitae* (‘in favour of life’) and should, therefore, be retained for capital cases. However, one could argue that by using peremptory challenges, the accused can ‘pack’ the jury with jurors more sympathetic to the defence and, thus, is able to practise blatant discrimination on the basis of someone’s appearance only (Denning, 1982:68–70). The number of peremptory challenges allowed the accused in England has varied through the centuries; at common law it was 35, it was set at 20 by a statute in 1509, it became 17 under s.35 of the *Criminal Justice Act 1948*, it was reduced to 3 by the *Criminal Law Act 1977*. The peremptory challenge was abolished in England by s.118(1) of the *Criminal Evidence Act 1988*. In Australia, the prosecution and the defence solicitor may exercise three to eight peremptory challenges, depending on the jurisdiction. As in Australia and New Zealand, but unlike in the United States, in England and Wales and Scotland challenges for cause are rare. It can be seen that the scope for selecting jurors is very limited in Great Britain, Australia and New Zealand and there is no *voir dire* equivalent to that in the United States. Interestingly enough, however, about one-fifth of aborted trials in Australia are halted because a juror knows a trial participant (North, 2000).⁸² Before a trial starts, during the *voir dire* hearing both the defendant and the prosecution can reject a number of prospective jurors without giving any reason other than they do not like the look of them. The number of peremptory challenges varies from jurisdiction to jurisdiction. At the time of writing in Australia, each side is allowed six peremptory challenges in Victoria but three only in New South Wales. In the two States, the two sides can also challenge a number of jurors for cause. By comparison, in England and Wales while the *Juries Act 1974* preserves both a statutory and common law grounds for challenging individual prospective jurors mainly on the basis of presumed or actual partiality (see Buxton, 1990a, 1990b), Baldwin and McConville (1980a) reported that challenging jurors for cause was a rather uncommon practice in their Birmingham study since in only one trial in seven was the right to challenge potential jurors exercised; furthermore, where there was a challenge, it generally

The use of the term ‘scientific jury selection’ conveys an impression of accuracy and precision. However, it is not justified and scepticism is warranted about some of the extravagant claims made for it.

meant challenging one potential juror. It thus came as no surprise to find that 'the final composition of the juries had in effect been largely unaffected by the use of challenges' (p. 39). In support of Baldwin and McConville, Lloyd-Bostock (1996) pointed out that research on more than 2000 cases in the UK found that the use of peremptory challenges (when it was still possible) was not correlated with acquittal more frequently. However, in the *R v. Maxwell* trial⁸³ in England, which received a lot of pre-trial publicity, Phillips J directed that a questionnaire be administered to potential jurors by court officials to ascertain both their availability and any possibility that they were unduly prejudiced against the defendant because of pre-trial publicity. His Lordship ruled that the information thus collected would be of help to him in deciding if jurors ought not to sit on that case and would also be helpful to counsel when considering challenging potential jurors for cause (Victoria Law Reform Committee, 1995:8).

Lawyers and trial consultants in the United States use one or more of three approaches to select jurors (Brigham, 2006:18–19): (a) focusing on general attitudes or personality characteristics such as legal authoritarianism; (b) case-specific attitudes; and (c) supplemental juror questionnaires. Wrightsman and Fulero (2005) describe a case in which a prospective juror was asked to complete a 100-item supplemental questionnaire and refused to answer questions on religion, income and political party affiliation. She was found in contempt of court and imprisoned for three days. By using the juror challenge procedure and supplemental juror questionnaires that are reviewed by the lawyers on both sides such as the 'Juror Bias Scale' (see Kassin and Wrightsman, 1983) an accused in the United States, especially one with a lot of money, can influence significantly the *voir dire* and the composition of the jury who will try the case and pass sentence. As far as it has been possible to ascertain, in the much-publicised O.J. Simpson trial,⁸⁴ for example, prospective jurors had to respond to a 61-page questionnaire comprising 294 questions (Gordon, 1997). The whole *voir dire* process is predicated on the assumption that jurors give honest answers. However, the validity of this assumption is questionable in light of evidence reported that between 25 and 30 per cent of real ex-jurors surveyed in one study admitted to having concealed relevant information about themselves when questioned in court (Seltzer et al., 1991).

The cases that are decided by juries in English-speaking western common law countries cannot be said to be representative of criminal cases as a number of processes negate this and, similarly, the individuals who serve as jurors cannot be said to be representative of their community (Kadane, 1993). Furthermore, every jury case is unique in terms of the defendant, the victim, the attorneys and the quality of their advocacy skills, the type and strength of the evidence against the defendant, the composition of the jury and the way in which the attorney will frame his/her arguments. The question, therefore, arises of whether 'scientific', systematic jury selection is as possible and successful in influencing trial outcomes as some psychologists and jury selection experts claim. After all, such experts have a vested interest since they make a lot of money offering their services and advising attorneys

about the *voir dire* selection hearing. Extravagant claims have been made about systematic jury selection but scepticism is warranted (Lloyd-Bostock, 1988:52). The use of the term ‘scientific jury selection’ has been criticised by Hans and Vidmar (1986) on the basis that it conveys an impression of accuracy and precision not justified by existing knowledge and methods. The same criticism still applies.

The very notion of systematic jury selection is also controversial for other reasons. Its supporters maintain that jury selection *per se* is a justifiable practice and should be empirically based. Its critics, on the other hand, maintain that selecting jurors is incompatible with the ideal of a representative jury chosen by a random process. The controversy is one that is unlikely to be resolved in the foreseeable future. Meanwhile, students of legal psychology should note that a lot of juror research has concerned itself with how individual jurors in serious criminal cases behave before they retire to deliberate (see Hastie, 1993b, and the section ‘Jury deliberation’ below). This focus stems from a belief that: (a) most jurors have decided on a verdict before they retire to deliberate; and (b) that the pre-deliberation distribution of individual juror’s verdict preferences is the best predictor of the final jury verdict (Kalven and Zeisel, 1966; McCabe and Purves, 1974). A few studies have examined the impact on jury decisions of both the strength of the evidence against the defendant and extralegal factors. In considering the alleged importance of pre-deliberation distribution of individual juror verdict preferences, the reader should also remember that it is the strength of the evidence against the defendant that plays the most important role in determining trial outcome and, in the context of jury deliberation, individual juror bias and legally irrelevant factors play a minor role when the evidence against the defendant is weak (Lloyd-Bostock, 1988:48; Reskin and Visher, 1986).

Examination of jury literature shows that: (a) some enduring characteristics of jurors are useful in understanding the jury verdict; and (b) that it is the interaction of juror and case characteristics that should be the focus of the jury researcher since neither set of variables can be said to be operating alone. In the absence of sufficient such research, a certain amount of scepticism is therefore warranted when considering research findings concerning the relationship between juror characteristics and verdict. In fact, such scepticism is further supported by the knowledge that studies of real juries, such as Baldwin and McConville’s (1979) study, found that in 500 non-guilty pleas dealt with by the Birmingham Crown Court in England during the period from February 1975 to September 1976, ‘no single social factor [class, age, sex and race] nor as far as we could detect, any groups of factors operating in combination produced any significant variation in the verdicts returned across the board’ (p. 104).

Juror empanelling in celebrated cases often provides ample material for the sensationalist print and electronic media, but the simple truth is that if there is good, hard evidence against the defendant, the likelihood is that it will be legal argument during the trial and not the composition of the jury that will win the day (see Visher, 1987). Despite their limitations, a significant contribution of mock-jury

studies has been to highlight the importance of non-legal characteristics of the defendant in jury decision-making about the verdict (Stephenson, 1992:200). What, then, is the evidence that a number of characteristics of jurors alone, or in combination (identified during *voir dire* impact) can impact significantly on jury verdicts?

Pre-Trial Publicity

While the debate about free press vs fair trial continues unabated, as any seasoned trial lawyer knows, the outcome of a trial is not determined only by the charges, the facts of the case, the judge, the jury or which lawyer is acting for each side, but also by what has gone on before the trial (for example, coverage by the media, plea-bargaining). Countries vary as to how they balance a defendant's right to a fair trial and the right to a free press. Of course, misuse of power by the media is a phenomenon that afflicts many a society worldwide and it is the courts' role to ensure a fair trial by, *inter alia*, enforcing legal restrictions on pre-trial publicity. In the United States, fundamental fairness in prosecuting federal crimes is provided in Article III of the Constitution, the Sixth Amendment, the Due Process Clause of the Fifth Amendment, and the Federal Rules of Civil Procedure (FRCP). In fact, Rule 21(a) of the FRCP provides for the trial to be held elsewhere to protect an accused from prejudice. Recognising the real threat posed by prejudicial publicity, restrictions have been imposed on trial publicity by the courts in Britain by the *Contempt of Court Act 1981*. Section 2(3) of the said Act provides for publicity before or during a trial is only a contempt when there is 'a substantial risk that the course of justice in the proceedings in question will be seriously impeded or prejudiced'. This restriction is supported by the weight of the evidence in the empirical literature (see Steblay et al.'s 1999 meta-analysis of 44 studies) showing that case-specific pre-trial publicity in both civil and criminal cases impacts adversely on prosecution verdicts (that is, makes a guilty verdict significantly more likely) by potential jurors who are presented with negative pre-trial information about the defendant (Bornstein et al., 2002; Honess et al., 2003; Hope et al., 2004). It should also be noted in this context, however, that some judiciary are reluctant to accept that pre- and mid-trial publicity may prejudice a trial (Studebaker and Penrod, 1997). As far as the impact of pre-trial publicity on actual jurors is concerned, post-trial interviews of judges, lawyers and ex-jurors in criminal cases during 1997–2000 by Chesterman et al. (2001) in New South Wales, Australia, found that 8 per cent of the verdicts were believed to have been influenced more by publicity than by the evidence. The finding, however, should be treated with caution due to serious methodological flaws of the study (Goodman-Delahunty and Tait, 2006:58). An attempt by Kovera (2002) to study the effects of general (rather than case-specific) publicity on mock-jurors' decision-making has also found that negative pre-trial information leads to more guilty verdicts and, also, that pre-trial information about the offence in question (rape) changed the standards mock jurors used to evaluate a defendant's guilt. However, as Memon et al. (2003:157) have pointed out, Kovera (2002) did not

examine jury deliberation processes, and operationally defined ‘pre-trial publicity’ to mean a two-minute news story, whereas in real life jurors in a rape trial would be exposed to a barrage of news coverage about sexual offences from a number of sources over a period of time. Some methodological weaknesses of pre-trial publicity mock-juror studies have been pointed out by Memon et al. (2003) and Studebaker et al. (2002) and include: using student subjects; having very short time intervals between publicity and trial; and, finally, not using video- or audio-represented pre-trial publicity. Such methodological weaknesses contribute to low external validity and, unfortunately, reinforce some lawyers’ scepticism towards mock-juror studies. Regarding how real jurors conceptualise ‘prejudice’, Vidmar’s (2002) work with real jurors on pre- and mid-trial publicity in criminal and civil cases has identified four types of prejudice:

- 1 ‘generic’ when a juror’s prejudice and stereotypes against particular categories of people is transferred to the trial
- 2 ‘conformity’ whereby a juror feels under pressure to return a verdict in conformity with the expectation of the majority of the community
- 3 ‘specific’ when a juror who, for example, has been a victim of crime, is prejudiced against criminal defendants
- 4 ‘interest’ prejudice operates when a juror is somehow related to the defendant and has a reason to return a not-guilty verdict.

Finally, Vidmar’s (2002) research indicates that pre-trial publicity is unlikely to impact on jurors with polarised attitudes towards a particular crime or defendant.

The Reported Importance of Juror Characteristics

One book on trial advocacy contains reference to ‘time-honoured selection criteria which counsel have used in years past’ (Mauet and McCrimmon, 1993:25). The same authors, however, doubt the utility of generalising theories of jury selection from the United States to Australia because of the ‘cultural mosaic which characterises contemporary Australian society’ (p. 26). Without any reference to any supporting empirical research, Mauet and McCrimmon emphasise the importance of having jurors with similar characteristics and backgrounds as one’s client’s; point out that prosecutors in a criminal case and defence counsel in a civil case prefer ‘middle-aged or retired jurors who have average incomes, stable marriages, work in blue-collar or white-collar jobs, are in business or generally can hold jobs which demonstrate an adherence to the traditional work ethic’ (p. 26); refer to the alleged importance of potential jurors’ body language and physical appearance as a source of useful indicators in selecting jurors (p. 27) and, finally, they note the dichotomy between ‘strong’ and ‘weak’ jurors, with the latter said to be favoured by the party that has the onus of proof in a criminal or civil case (p. 27).

Lawyers have been known to rely on their own intuition and trial experience to ‘read’ prospective jurors’ suitability for their case. Guidance on juror selection

has a long history (Donovan, [1887]1985).⁸⁵ It has been found that lawyers assess juror similarity on the basis of ideological orientation, attitudes towards legal technicalities, age and gender (Penrod, 1979). Regarding the *composition* of the jury, it needs to be remembered that a homogeneous jury in terms of its demographic composition, would not be representative of the general population; in other words, it cannot be 'a microcosm of society'. Researchers have found that heterogeneous juries solve problems better than homogeneous ones (Zeisel, 1971; Lempert, 1975). In support of many lawyers' belief, juror similarity to the defendant has been found to be a relevant factor in understanding juror decision-making. A number of studies have reported that mock jurors are less likely to find a defendant not-guilty if he/she is similar to them in terms of beliefs, ethnicity or background (Amato, 1979; Griffitt and Jackson, 1973; Kerr et al., 1995; Stephan and Stephan, 1986). However, if a defendant who is similar to mock jurors is said to have acted in such a way as to bring shame on those similar to him, they are more likely to treat him more harshly (Kerr et al., 1995).

Concerning the importance of jurors' *gender*, women are minimised on juries in England and Wales (Lloyd-Bostock and Thomas, 1999). Henning (2002) reported that males in Australia were more likely to believe in rape stereotypes and, also, that mock jurors who scored high on rape myth acceptance were more likely to acquit the accused and to hold the victim more responsible for acquaintance rape. The pioneering study by Sealy and Cornish (1973) reported that black women were significantly more likely to convict on circumstantial evidence, giving significantly more guilty verdicts in rape and murder cases than do black males. The weight of the research evidence shows that *female* jurors are more likely to convict a defendant charged with rape⁸⁶ or child sexual abuse,⁸⁷ especially if there had been no eye contact between the rape victim and the offender during the attack.⁸⁸ Interestingly, Brekke and Borgida reported that juror deliberation narrows such gender verdict differences. However, studies have reported conflicting findings regarding the relationship between jurors' gender and verdict (Arce, 1995:566). A follow-up study of jurors in Florida by Moran and Comfort (1982) found no gender differences as far as pre-deliberation verdict or verdict is concerned. Memon and Shuman (1998) surveyed members of the public awaiting jury service in Dallas regarding possible differences in their perception of experts in civil disputes as a function of a juror's gender and found no differences. As one might have expected, *younger* jurors have been found to be more likely to acquit (Hans and Vidmar, 1982). As far as the importance of having jurors of a higher *educational standard* is concerned, while Hans and Vidmar (1982) reported them as more likely to convict, Mills and Bohannon (1980) found such male mock jurors more likely to acquit. The Spanish researcher Ramon Arce found in his doctoral thesis at the University of Santiago in Spain in the late 1980s that a juror's *ideology* (progressive vs conservative) and *attribution of responsibility* (internal vs external) only explained 10 per cent of the variance in juror decision-making.⁸⁹

As far as *race* is concerned (see also next chapter), a number of authors (for example, Zander and Henderson, 1993; Lloyd-Bostock and Thomas, 1999) have drawn attention to the fact that in England non-whites/ethnic minorities are under-represented on juries. The *Auld Report* (2001) recommended that in trials in England and Wales where race is an issue, at least three jurors should be from an ethnic minority group – a proposal that was quickly ruled out by the government (Gibb, 2001). The Antonio and Hans (2001) questionnaire survey of jurors found that whites, in general, were more satisfied with their jury experience than Hispanics and other racial minority groups (p. 78). A predominantly white jury sample was more likely to be persuaded by a black than by a white female expert (Memon and Shuman, 1998:189).

The US Supreme Court has stated that peremptory challenges on the basis of a juror's race are unconstitutional (see above). In the first Rodney King trial, an all-white jury in Ventura county, Los Angeles, a predominantly white suburb, acquitted the four white policemen of the charge (under State legislation) of assaulting King, an African-American. In the aftermath of the Los Angeles riots, a racially mixed jury in Los Angeles County found two of the officers guilty of civil rights crimes the following year, casting doubt on the Supreme Court's sense of realism in pushing for sexless and colourblind jury decision-making (Hans, 1995a).

The well-known study of actual jury trials in Birmingham by Baldwin and McConville (1979) found that the racial composition of a jury was not important in explaining the verdict. It was the race of the defendant that emerged as significant – even when a jury was predominantly black, a black defendant was more likely to feature among perverse convictions than acquittals. Daudistel et al.'s (1999) study of the disposition of a variety of criminal offences found that jurors recommended twice as long sentences for Anglo (that is, white, non-Hispanic) than for Hispanic defendants. They also found that the length of sentence for Anglo defendants increased as a function of the number of Hispanics on the jury. The meta-analysis of 37 studies by Mazzella and Feingold (1994) found that, perhaps due to *jurors' stereotypes*, African-Americans were given harsher sentences for negligent homicide, in contrast to whites who were given harsher penalties for economic crimes such as fraud and embezzlement. Evidence for *juror prejudice and racial discrimination* has also been reported in Canada (Avio, 1988; Bagby et al., 1994). Of course, if a criminal defendant in England, Australia or in the United States is black the chances are he/she is also of low socioeconomic status, which, in turn, correlates with having a court-appointed counsel rather than a private one. Very few scholars of the criminal justice system in western countries doubt that, to a significant degree, a defendant's wealth can buy 'justice' in the courts. Devine et al.'s literature review (2001) of the racial composition of the jury concluded that: 'Jury-defendant bias has thus been observed across a number of studies and contexts and appears to be a robust phenomenon. When the evidence against the defendant is weak or ambiguous, jurors that are demographically similar to the defendant tend to be lenient; however, when the defendant's culpability is clear, juries tend

to be harsher' (p. 674). Kimmelmeier (2005) maintains, against the weight of the evidence, that race is a significant factor in white mock-jurors' decision-making.

Persons high on *authoritarianism* are characterised by deference to authority, power-orientation, rigidity, conventional beliefs and conservativeness (Adorno et al., 1950). Fujita (2007) found that in Japan, people scoring high on authoritarianism have negative attitudes towards lay participation in the justice system. In Japan the 'Saiban-in' system was introduced in 2009. It is a system of a mixed jury system for every one case and will consist of six lay persons (selected at random from voter lists) and three professional judges to deal with offences punishable with life imprisonment or the death penalty. A juror's *authoritarianism* correlates with imposing a severer sentence but not with conviction proneness (Stephenson, 1992:198). Narby et al.'s (1993) meta-analysis of 20 studies distinguished between 'legal' and 'traditional' authoritarianism and found the latter was a better predictor of verdict preference. Finally, there is some evidence that high-authoritarian jurors are more likely to change their verdict preferences during deliberation.

A personality trait that is similar to authoritarianism is *dogmatism*, which denotes a closed-minded person, with rigid thinking but not necessarily right-wing attitudes. A juror's dogmatism appears to correlate with the imposition of harsher sentences and convicting more often, unless the judge reminds them of their nullification capability (Shaffer and Kerwin, 1992). Regarding jurors' *conservatism*, studies have reported conflicting findings (Arce et al., 1992:435). The presence on a jury of jurors with *previous experience* correlates with a greater likelihood of a guilty verdict (Dillehay and Nietzel, 1985) and severer sentences in both criminal and civil trials (Himelein et al., 1991).

The relationship between one's *attitudes* and behaviour is one of the most researched areas but remains a controversial topic in social psychology (see Jonas et al., 1995, for an excellent discussion). Baldwin and McConville (1980a) concluded that it is not so much personal or social characteristics of the foreperson or jurors that explain the verdict but 'individual attitudes, beliefs and prejudices, as they are brought out in discussions of the particular point at issue' (p. 41). A meta-analysis of the relevant empirical literature by Krauss (1995) concluded that attitudes do predict behaviour. It appears that the weight of the empirical evidence (using simulation studies) supports a relationship between jurors' attitudes and their decision making. However, there is a great need for studies of real juries/jurors such as that of Baldwin and McConville (1980a) that would also explore the hypothesis that it is jurors' attitudes to the specific case at hand that are more important from an attorney's point of view and not who the jurors are or their general attitudes (Arce, 1995:566).

Conflicting findings have been reported about death-qualified juries and the likelihood of guilty verdicts.

According to Brigham (2006), approximately three-quarters of the states and the Federal Government in the United States authorise the death penalty, despite strong evidence (see also the next chapter) that racial disparity in sentencing has more to do with the race of the defendant and the victim. Capital juries are unique in American

jurisprudence and in human experience generally because nowhere else does a group of ordinary members of the public, acting under legal authority, rationally discuss taking the life of another human being (Haney et al., 1994:149). For Weisberg (1983)⁹⁰ death penalty jurors are reminiscent of subjects in Stanley Milgram's (1974) famous obedience experiments because they are placed in a situation that is both novel and disorienting for them, experience stress, confront a moral dilemma and may well resort to 'a professional, symbolic interpretation of the situation' to get oriented.

There exists a sizeable body of literature on attitudes towards the death penalty and jury verdicts and interesting findings have already been reported by researchers participating in the Capital Jury Project (see Bowers, 1995; Bowers et al., 1998, 2001). Utilising an in-depth standard protocol to interview ex-jurors in capital cases in 14 states that have the most variation in death penalty sentencing, the Capital Jury Project⁹¹ (CJP) has been an attempt by a consortium of university-based research studies (founded in 1991) to improve on mock-jury research with student subjects and to resolve the debate concerning arbitrary or racist death penalties in the United States. By October 2007, a total of 1198 jurors from 353 capital juries in the 14 states had been interviewed. CJP researchers have found that a defendant's race is a significant factor in understanding jury decisions; more specifically, if the defendant is white, the jury is more likely to assess him as mentally unstable (a mitigating factor) than if he were black. In turn, this mitigating factor influences a jury's penalty decision, resulting in a sentence that is less harsh than the death penalty. According to Ellsworth (1993) and ForsterLee et al. (1999), attitudes towards the death penalty are generally strongly held and closely related to other attitudes about the criminal justice system (p. 48). More importantly, however, any potential jurors in the United States who are found during *voir dire* to be opposed to the death penalty in principle and thus unable to return a fair verdict would be eliminated from jury service, as stated by the US Supreme Court in *Witherspoon v. Illinois*, 1968. It has been reported that death-qualified jury candidates are influenced more by defendant characteristics than are death-penalty-excludable candidates (Williams and McShane, 1990).

However, conflicting views have been expressed about whether death-qualified juries are conviction prone. The APA's *amicus* brief, submitted on behalf of the defendant McCree in *Lockhart v. McCree* 106 S.Ct. 1758 (1986) concluded, on the basis of existing experimental evidence, that: (a) such juries are conviction prone; (b) by being under-representative, death qualified juries violate a defendant's right to a trial by a representative jury; and, finally, (c) death-qualification interferes with the proper functioning of the jury. Subsequent researchers reached the same conclusion.⁹² Further experimental evidence from jury simulation has been reported by Ellsworth (1993) and Mauro (1991). Interestingly, Chief Justice Rehnquist was very critical of the methodology of mock-jury research and did not accept the view expressed in the APA's *amicus* brief. Criticising the US Supreme Court for mistrusting 'social scientific evidence', Mauro (1991:252) claimed that in *Lockhart*

v. McCree: 'The Supreme Court clearly did not appreciate the social scientific evidence of the biasing effects of death qualification'. Elliott's (1991) literature review of studies using brief written cases, studies based on the recall of real jurors and studies using audiotaped or videotaped trial presentation, concluded that the main assertion in the APA's *amicus* brief about the conviction proneness of death-qualified juries is not supported by the available research data; support was found for a weak relationship 'between death penalty attitude and pre-deliberation verdict preferences' (p. 263). Similarly, Nietzel et al.'s (1999) literature review concluded that jury verdicts in capital cases are not associated with jurors' beliefs about the death penalty (p. 23). However, Bowers et al. (1998), on the basis of data from 916 actual jurors from 257 capital juries in eleven states, concluded that a juror's attitudes to the death penalty is crucial in understanding how he/she processes trial information and behaves when the jury retires to deliberate. More specifically, jurors with pro-death penalty attitudes were more likely to make up their minds about the defendant's guilt and the appropriateness of the death penalty very early in the trial process and, consequently, were significantly more likely to want to impose the death penalty even when the jury was deliberating whether to find the defendant guilty or innocent.

Of course, a potential juror's attitude towards the death penalty does not seem to exist in isolation but is part of a cluster of attitudes to other criminal justice issues, such as how trustworthy prosecutors are or the desirability of a crime control approach generally across the board in criminal justice (Fitzgerald and Ellsworth, 1984). In light of the contradictory conclusions reported, the jury is still out on the alleged prosecution proneness of death-qualified jurors. This conclusion should not surprise the reader because, as Arce (1995) points out, research into the relationship between individual characteristics of jurors and their verdicts have generally overlooked the interaction between personality and such important variables as the type of legal case and the strength of the evidence against the defendant/plaintiff. Arce (1995) has argued that the theory of the integration of information⁹³ can provide a plausible explanation for the relationship found by some researchers between a juror's psychosocial characteristics and their verdict. From this perspective, juror characteristics act more as filters that bias comprehension of the evidence presented in court, especially where the evidence is finely balanced and requires interpretation by the juror (p. 566).⁹⁴ In conclusion, then, demographic characteristics of the jury interact with characteristics of the defendant, resulting in a bias in favour of defendants who are similar to the jury in some significant way (Devine et al., 2001:673). However, serious flaws of the jury notwithstanding, the right to a jury trial is guaranteed by the Sixth Amendment of the American Constitution. Returning to the issue of the death penalty, in the case of *Ring v. Arizona* 01-488 (2002) the Supreme Court declared unconstitutional death sentencing laws in Arizona and four other states where the decision to impose the death penalty rested with the judge instead of the jury, thus violating the constitutional right to a jury trial.

Juror Competence

In considering the vexed issue of jury competence, it needs to be remembered that, as McEwan (2000) emphasises, trial jurors face a serious problem that does not confront judges, namely that jurors listen to evidence sometimes over a lengthy period of time without having a legal context in which to locate it (p. 112). While both sides in a trial can and do challenge jurors on a number of grounds, there is no requirement that the court be satisfied that a juror is competent, has the capacity to decide factually complex legal cases (that is, involving expert scientific testimony), or to decide legally complex legal issues (for example, judicial instruction in complex civil fraud cases) and, finally, has the capacity to reach reasoned decisions (Goodman-Delahunty and Tait, 2006:61). Not surprisingly, therefore, critics of the jury have charged that jurors are often incompetent in more ways than one.

Comprehending Evidence

It is fundamental to most peoples' notion of a 'fair jury trial' that jurors understand the law, especially the elements of the offence/s charged. However, neither was found to be the case in 35 of 48 jury trials examined in New Zealand (New Zealand Law Commission, 2001). Of crucial importance in jurors' deciding whether a defendant is guilty or not is how they evaluate the eyewitness evidence that incriminates him. Researchers have found that mock jurors are influenced more by witness confidence than by a range of factors known to impact negatively on eyewitness testimony accuracy (Cutler et al., 1990). In addition, mock jurors find it difficult to discount a defendant's confession made under pressure (that is, involuntarily) when instructed to do so and proceed to convict (Kassin and Sukel, 1997). Mixed results have been reported by mock-jury studies concerning whether jurors are able to ignore inadmissible evidence when instructed to do so by the judge (London and Nunez, 2000).

Jackson (1996) reported an original study in Northern Ireland in which jurors who attended for jury service over a six-month period at Belfast Crown Court were asked to complete questionnaires regarding various aspects of jury service. Drawing on data from 237 questionnaires it was found that, overall, jurors reported a high level of comprehension of the trial participants – the judge, prosecution counsel, police witnesses, civilian witnesses, the accused and expert witnesses. Also, 97 per cent understood the summing up and 84 per cent said they understood why they had been told to disregard some information. However, Jackson's findings need to be treated with caution for only over a quarter of the jurors were sworn in to hear a case. Furthermore, while there is evidence from shadow jury research (McCabe and Purves, 1974) that jurors are conscientious about the task, their initial enthusiasm and vigilance fades away in the course of the trial (Stephenson, 1992:187). Also,

jurors are not selected because they have any special qualifications. It therefore should come as no surprise to find that jurors have been shown to have serious difficulty comprehending fine semantic differences between different legal concepts (Severance et al., 1992), have poor recall of important trial information (Hastie et al., 1983), especially in such complex trials as those involving fraud, for example (see Nathanson, 1995, for a good discussion of relevant empirical studies). In fact, such was the concern of the Roskill Committee (1986) that it recommended that a special tribunal should replace the jury in complex fraud cases. Some authors, however, have defended most jurors' competence to decide complex legal cases (Harding, 1988).

Zander and Henderson (1994) reported that 90 per cent of the more than 8000 Crown Court jurors who took part in a national British study over a two-week period in 1992 for the Royal Commission on Criminal Justice as individuals, and the jury as a group, had been able to understand and remember the evidence in the 3191 cases involved. Furthermore, in most cases prosecution and defence barristers were of the view that the jury would have had no trouble understanding or remembering the evidence. Zander and Henderson's findings, however, do not establish that the jurors surveyed actually understood and remembered the evidence since no test for that was included. Using a composite measure of case complexity based on data collected from 94 judges, Heuer and Penrod (1994b) surveyed 81 per cent of jurors in 160 trials (75 civil, 85 criminal). They found that as the amount of information in a case increased, the jurors admitted to greater difficulty deciding the case (p. 536). Horowitz et al. (1996) have also reported that as evidence complexity increases, juror comprehension decreases. Rather alarming in this context is the finding from the Capital Jury Project that, while capital jurors could remember well details about the defendant, they admitted to having hardly comprehended and could barely recall the legal rules pertinent to their decision to impose the death penalty (Luginbuhl and Howe, 1995; Sarat, 1995). In view of the repeated finding that jurors are influenced by expert witness (Schuller and Cripps, 1998), it is important to know how jurors cope with expert testimony. The available evidence⁹⁵ (Kovera et al., 1999; McAuliff and Kovera, 2003) shows that some jurors are not able to evaluate scientific evidence proffered by an expert but do so better if judicial instructions to the jury are revised to make them more comprehensible (Grosscup and Penrod, 2002). Finally, before one concludes about the abilities of jurors to comprehend evidence in complex trials, one needs to remember that: (a) jurors are active interpreters of trial information rather than passive recipients of evidence (Pennington and Hastie, 1981, 1993); and (b) there is evidence from mock-jury studies that allowing jurors to take notes during the trial or providing them with written statements of expert witness' direct testimony before the presentation of the testimony enables them to make fine legal distinctions (Horowitz and ForsterLee, 2001; ForsterLee et al., 2001). Thus, jurors' apparent difficulties to comprehend complex trial information could be

overcome to a large extent by providing them with sufficient help to cope with the demands placed on human information-processing abilities by a trial, especially a complex one.

Understanding and Following the Judge's Instructions/ the Jury Charge

A jury's decision about verdict and, where it applies, sentence, is final. However, either side can appeal on a point of law. Inadequacies of the judicial instructions/charges to the jury is a ground for appeal. Given that jurors tend to rely on the judge's instructions to guide them in their deliberation (Constanzo and Constanzo, 1994), it is essential that jurors first of all understand such instructions. Drawing on Ogloff and Rose (2005), studies in Canada have reported jury reversal rates by appellate courts ranging from 34 per cent to 74 per cent. Four methods have been used to investigate jurors' comprehension of judges' instructions (Ogloff and Rose, 2005:409–26), namely, data from: actual jurors; judges; comprehension studies of judicial instructions outside context; and, finally, comprehension experimental simulation studies. On the basis of their extensive literature review, Ogloff and Rose (2005) concluded that, whatever the method used, 'jurors appear largely incapable of understanding judicial instructions as they are traditionally delivered by the judge' (p. 425). Interestingly, both judges and jurors believe that jurors understand the instructions judges give them and also find them useful. How jurors find useful something they barely understand, of course, is an interesting question. Let us next consider some of the studies of juror comprehension of judges' instructions.

Nietzel et al.'s (1999) meta-analysis of 48 published studies examined the impact on juror/jury comprehension and decision-making, of a no-instruction condition as well as an instruction condition, which comprised eight types of such instructions: definitions of legal principles, instructions to ignore pre-trial publicity, about jury nullification, to ignore evidence or use it for certain purposes only, how to evaluate eyewitness testimony, regarding the joinder of criminal charges, how to evaluate confessions and, finally, 'other' type of instruction. They concluded that 'when instructions are not psychologically well crafted, they are minimally effective. When admonitions or directives from a judge are worded and delivered in ways designed to increase their effects,⁹⁶ jurors are, to some degree, better informed, guided, and even constrained by these instructions' (p. 44).

While it would be unfair to always blame jurors for not following instructions from the bench as if all judges and counsel were well-versed in the art of clear verbal communication, there is evidence that jurors do have difficulty understanding as well as following judges' legal instructions (Coyle, 1995).⁹⁷ Heuer and Penrod (1995:536) found that, as the complexity of the evidence in a case increased, jurors were less confident that their verdict reflected a proper understanding of

the judge's instructions. Suggestions to ameliorate this problem have included: rewriting and standardising judges' instructions to juries (Hans, 1992); allowing jurors to take notes in order to assist their memory of important trial details⁹⁸ and asking questions during the trial in order to clarify issues;⁹⁹ and, finally, facilitating juror compliance with judicial instruction by presenting that instruction early in the evidence processing task.¹⁰⁰ However, the various reforms suggested do not solve the problem that jurors may well decide not to follow the judge's instruction to ignore pre-trial publicity and/or other extralegal evidence that should not have been presented during the trial, such as a defendant's prior convictions (Casper and Benedict, 1993:66). Strong support for this concern has been provided by the Capital Jury Project in the United States.

The US Supreme Court in *Gregg* stated a requirement that capital jurors must decide guilt and punishment separately. However, Sandys (1995:1221) found that interviews with 67 capital jurors in Kentucky revealed that they made the decision concurrently, before the penalty stage of the trial, thus rendering irrelevant any subsequent evaluation of information about the defendant's mitigating and aggravating factors in order to decide on the right sentence. Emanating from the Capital Jury Project, Bowers (1995) reported evidence for the same undesirable practice by capital jurors, adding that such decisions are made 'on the bases of their unguided feelings or reactions to the crime'; that the findings also show that sentencing guidelines provide 'legal cover' to many who have already decided on their verdict, and 'legal leverage' for convincing those jurors who have not made up their minds. Bowers concluded that, in either case, the guidelines 'appear to lessen the sense of responsibility for imposing an awful punishment' (p. 1102). Such findings show that lay persons are perhaps not competent to decide guilt in serious criminal cases, let alone decide the appropriate sanction and whether to impose the death penalty on a defendant. Finally, the capacity of juries to reach reasoned decisions can be gauged by the findings of studies of real juries. Examination of the quality of deliberation can be on the basis of criteria such as whether jurors discuss the facts of the case before them, the instructions given them by the judge and if discussion of the different opinions is well-structured and well-managed. A recent study of 267 real jurors by Gastril et al. (2007) in the United States investigated the quality of jury deliberation in terms of the criteria mentioned and found it to be of a high level of compliance.

The Jury Foreperson

When the *voir dire* process is completed, the first task of the jurors is to elect a foreperson, unless the trial is in a jurisdiction that provides that this be done by the drawing of lots or that the first juror selected becomes the foreperson. The general public, practising attorneys, academic lawyers and researchers consider the foreperson a key figure in the courtroom (Bryan, 1971; Deosoran, 1993).

The Morris Committee (1965) in England was of the view that the foreperson should in principle be no different from other jury members but considered it a good idea that he/she should, as far as possible, possess the qualities of a good chairperson. According to Saks and Hastie (1978:190), the juror characteristics that predict foreperson election are male sex, high socioeconomic status, sitting at the end of the jury table and initiating discussion. Baldwin and McConville (1980a:40–1) found that the forepersons in their study were disproportionately male, 40 years or older and in managerial, professional and intermediate occupations. Similar findings were reported by Deosoran (1993). Interestingly, Baldwin and McConville (1980a) found no relationship between the social characteristics of forepersons and jury verdicts. The shadow jury research by McCabe and Purves (1974) similarly found that the foreperson did not seem to unduly influence jury members. This is in contrast to mock-jury findings by Bevan et al. (1958) that the personality of forepersons can impact on jury deliberations to the extent that they frequently change the opinions of individual jurors regarding what constitutes equitable damages in negligence cases. It may very well be the case that individual juror variables identified as important in a well-controlled experiment are not as important in the context of an actual jury where a host of factors are operating at the same time.

The foreperson can, of course, influence the outcome of the deliberation by directing discussion, timing poll votes and influencing whether poll votes will be public or secret (see below). The Spanish study by Arce (1995) found that forepersons talked the most. In another mock-jury study in Spain¹⁰¹ with 160 persons from the electoral register as subjects it was found that in hung juries the foreperson: (a) failed to control the deliberation in order to guide it to evaluate the evidence; (b) did not avoid destructive interventions; (c) failed to be persuasive; and (d) did not inspire either authority or respect (p. 269). In the light of their findings Arce et al. recommended that the foreperson should be trained in how to deal with the deliberation in order to be able to control destructive messages among the jurors, to guide the discussion towards evidence evaluation and to focus on verdict–evidence relationship (pp. 267–8). Further support for the significant role the foreperson can play in structuring the deliberation process has been provided by the New Zealand study of post-deliberation interviews of jurors. It was found, for example, that if the foreperson was weak in performing his/her role and the deliberation process was unstructured, some jurors would dominate the deliberation and some would feel intimidated by them (Tinsley, 2001). A follow-up survey of judicial practices in New Zealand reported that as a result of the juror survey, more judges provided guidance to jurors as far as selection of a foreperson is concerned (Ogloff et al., 2006). More research is needed on the foreperson to examine, for example, jury verdict and/or sentence severity as a function of the group-leadership style of the foreperson, the weight of the evidence

Mock-juror/jury studies in the United States indicate that the juror characteristics that predict foreperson election are male sex, high socioeconomic status, sitting at the end of the jury table and initiating discussion. Similarly, in England, forepersons in real trials are more likely to be male, 40 years or older and in managerial, professional and intermediate occupations.

against the defendant and the degree of homogeneity of the jurors in terms of relevant attitudes.

Litigation Strategies: A Joinder Effect?

Rule 8 of the US *Federal Rules of Criminal Procedure* permits a defendant to have his/her multiple charges dealt with in the same trial when the crimes he/she is charged with are of the same or similar nature or reflect the same event or revolve around the same plan or scheme. While joinder of criminal charges can be said to contribute to court efficiency and means a defendant does not have to prepare for a number of separate trials, it can also be said to carry the risk of the jury concluding that the defendant has a propensity for criminal behaviour as he/she is facing multiple charges (Nietzel et al., 1999:41) (p. 41). Nietzel et al.'s meta-analysis of the empirical literature published in 10 journals in the United States during 1977–94 led them to conclude that joinder of charges could disadvantage criminal defendants (p. 42).

Jury Deliberation

At the end of a criminal trial the judge will normally instruct the jury on both procedures and verdicts and the jury will then retire to the jury room to discuss the case and reach a verdict. The underlying belief is that 'jury deliberation is a reliable way of establishing the truth in a contentious matter' (Stephenson, 1992:179). What we know today about jury deliberation is from mock- and shadow-jury studies as well as from a small number of post-trial surveys of real jurors. None of the researchers in this area has observed real juries at their task. While accounts by ex-jurors are idiosyncratic and biased (Baldwin and McConville, 1980a), most of the mock research into jury decision-making¹⁰² focuses on juror behaviour at the pre-deliberation stage in the belief that most jurors have already decided on a verdict before they retire to deliberate and that first-ballot majority verdict preferences predict the final verdict reliably. This belief can be traced back to Kalven and Zeisel's (1966) reported finding that in nine out of ten juries the deliberation task is concerned with convincing a minority of jurors to change their mind and embrace the verdict of the majority. This is referred to as Kalven and Zeisel's 'liberation hypothesis'. It is established that jurors generally enter the deliberation room without a unanimous verdict; but what is the empirical support for Kalven and Zeisel's liberation hypothesis? As far as how individual verdict preferences are converted to a jury verdict, the New Zealand study of post-deliberation interviews with jurors in 48 trials (Tinsley, 2001) found that in 13 (27 per cent) an immediate straw poll was taken following a short discussion of the issues, in 21 (48 per cent) trials the jury discussed the evidence fully before voting, while in 14 (29 per cent) the jury did not review the legal issue and the evidence in a systematic way.

Using six-member juries, Tanford and Penrod (1986) found that in approximately 95 per cent of the time the side that had most of the votes at first ballot had the final verdict. However, the relationship between pre-deliberation distribution of juror preferences and jury verdict is not as simple as Kalven and Zeisel suggested (see also the section ‘Selecting jurors’ above). As stated above, in addition to jury size (see below), another pertinent factor is the foreperson. As far as it has been possible to ascertain, no published simulation jury study has examined jury deliberation as a function of jury size, the weight of the evidence against the defendant and whether a majority verdict is possible or not.

Ellsworth (1993:58) disagrees with Kalven and Zeisel’s generalisation about jury deliberation – that it is in only 5 per cent of the cases that the distribution of individual jurors’ pre-deliberation verdict preferences does not predict the final jury verdict – and points to the finding by Hastie et al. (1983) from their mock-jury research that the verdict of one-quarter of the juries who were in a minority before deliberation managed to prevail. It is worth noting in this context that, as Ellsworth (1993:58) points out, Kalven and Zeisel provide no details of how they came to their ‘liberation hypothesis’ conclusion. Meyers et al. (2001) reported that group discussion reinforces majority opinion, thus contributing to majority opinion prevailing as the final verdict in 90 per cent of occasions. The danger in such cases is that group discussion will result in group polarisation, that is, arriving at a group decision that is more extreme along the lines of group members’ initial judgements. However, if the evidence against the defendant is strong, there is less group polarisation, making it likely that a minority in favour of acquittal are persuaded in the course of the group discussion to convict (Arce et al., 1996). On the basis of their own work, the well-known American researchers Pennington and Hastie (1990:102) concluded that the relationship between individual jurors’ initial verdicts and the final jury verdict is more complex than the simple one proposed by Kalven and Zeisel (1966). Available empirical evidence (Hastie et al., 1983) indicates that we need to distinguish between: (a) deliberations in which jurors announce their verdict preferences before discussion begins in the jury room (known as ‘verdict-driven’ deliberations); and (b) deliberations in which jurors’ verdict preferences are expressed later in the deliberation process (known as ‘evidence-driven’ deliberations). In other words, with the latter there will be discussion before jurors have their first ballot and, consequently, first-ballot preferences may not reflect the jurors’ pre-deliberation preferences. In addition, there is the possibility, for example, that jury discussion may reduce an initial majority verdict that the defendant is guilty of first-degree murder to a final verdict of guilty of second-degree murder (Hastie et al., 1983:59).

Additional evidence that pre-deliberation juror preferences are not equivalent to first-ballot votes was reported by Davis et al. (1988), who found that the timing of a straw poll on individual first-ballot votes (that is, whether before any discussion or after five minutes of discussion) makes a significant difference in how individual jurors will change their initial verdict preferences to their first-ballot votes. The

findings by Hastie et al. (1983) and Davis et al. (1988), as well as findings reported regarding the importance of jury size (see below) and whether jurors are instructed to reach a unanimous as opposed to a majority verdict (Hastie et al., 1983; Kerr and MacCoun, 1985) indicate that: (a) jurors' pre-deliberation verdict preferences do not necessarily predict their first-ballot votes; and (b) the process by which jurors' pre-deliberation verdict preferences are somehow synthesised to yield a jury verdict is a complex one, probably more complex than Kalven and Zeisel or some jury researchers would like us to think. Sandys and Dillehay (1995) tested Kalven and Zeisel's 'liberation hypothesis' utilising 142 telephone interviews of a representative sample of ex-jurors who had decided felony cases in Lexington, Kentucky. Ex-jurors were asked what they did first, and second, upon retiring to deliberate, how much time they spent discussing the case before having their first ballot, and finally, the outcome of the first ballot. Sandys and Dillehay reported that: (a), in support of Kalven and Zeisel, a significant relationship was found between first-ballot votes and final jury verdict (p. 184); (b) that in most of the trials concerned the juries spent an average of 45 minutes discussing the case before having their first ballot; and (c) in only 11 per cent of the trials the jurors had a ballot without any discussion taking place (p. 191). Sandys and Dillehay concluded that their results suggest that deliberation plays a more significant role in shaping the verdicts of real juries than was conjectured by Kalven and Zeisel (1966) in the liberation hypothesis. The same view was expressed by Baldwin and McConville (1980a) on the basis of their study.

A number of factors have been found to influence the deliberation process and to impact on the jury's verdict. Recognising the crucial importance of jurors' feeling responsible for their verdict, the Eighth Amendment to the United States Constitution prohibits providing capital jurors with misleading information that undermines their sense of personal moral responsibility for imposing the death penalty (Hoffmann, 1995:1138). However, in order to lessen their responsibility capital jurors may well attribute responsibility to the relevant guided discretion, the judge, the defendant, the appeal process, they may perceive themselves as mere conduits of community values and/or finally, may feel a diffusion of responsibility to other members of the jury (Sherman, 1995:1244–5). Findings from the Capital Jury Project indicate that capital jurors try hard to distance themselves from the decision (Hans, 1995b:1235).

Socially 'successful' jurors have been found to talk more than less successful ones, men talk more than women and the foreperson talks a disproportionate amount of the time (Ellsworth, 1993:59). It has also been reported by Hastie et al. (1983) that if a jury is required to return a majority instead of a unanimous verdict, then minority jurors will participate less and will be paid less attention by the rest of the jury and that taking a vote very early on speeds up the deliberation process. Jury deliberation will take longer if the jury is evidence- rather than verdict-driven (Hastie et al., 1983) but this will not necessarily result in a different verdict. However, studies of real juries have found that the longer the retirement, the more likely it will lead to an acquittal (Baldwin and McConville, 1980a:42). More

specifically, Baldwin and McConville reported that the chances of acquittal virtually doubled with juries that were out for more than three hours (p. 42). Multiple charges against the defendant correlate with a greater likelihood of a guilty verdict (Tanford et al., 1985), as does knowledge that the defendant has a prior conviction (Greene and Dodge, 1995). It has also been found that if a reasonable doubt standard of proof is emphasised, then jurors are more likely to acquit (McCabe and Purves, 1974). As a jury proceeds with their discussion, the tendency is for minority jurors to move closer to the majority view and for leniency to prevail (Kerr and Bray, 1982). Osborne et al. (1986), however, found that, following deliberation, jurors shift to a severer decision if the jury is heterogeneous rather than homogeneous. In this sense, the composition of a jury can be said to be related to its verdict.

In the 1970s the US Supreme Court upheld the use of *six-person juries* in criminal (*Williams v. Florida*, 399 US 78, 86, [1970]) and civil (*Colgrove v. Battin*, 413 US 149, 156 [1973]) cases (Cammack, 1995:435). Thomas and Pollack (1992) applied probability theory to assess how far jury size and majority verdicts could be reduced without impacting adversely on the jury as a microcosm of the general community from which it is drawn. Their findings provided support for the Supreme Court's decisions in *Williams* and *Colgrove*. However, as Stephen Krauss (1995) points out, Thomas and Pollack's results are based on the assumption that juries comprise a random sample of the relevant community of potential jurors. Real jurors cannot be said to constitute such representative bodies of their parent communities (Airs and Shaw, 1999), a factor that renders Thomas and Pollack's findings 'meaningless' (Stanton Krauss, 1995:924). The sad reality is that the US Supreme Court, like the judiciary and legislatures in other western common law countries, has as yet to come to grips with the contradictions that are inherent in the jury concept itself.

Smaller juries, such as 6-member ones, can only be less representative of the broader community than the conventional 12-member jury, and their verdicts are likely to be different (Hans and Vidmar, 1986; Zeisel and Diamond, 1987). In fact, a meta-analysis by Saks and Marti (1997) of studies that investigated 6- vs 12-member juries found that juries of 12: are more representative of the community; contain a range of opinion and experience; generate more arguments; minority views are more likely to be represented; deliberate longer because twice as many people are present but, on average, each juror contributes the same to the deliberation (Hastie et al., 1983). The finding that each juror on average contributes the same to the deliberation in 6- and in 12-member juries may well be an artefact of the homogeneity of the mock jurors (psychology undergraduates used in predominantly US studies); small juries involve less communication per unit time, are less likely to recall evidence accurately or to examine the evidence thoroughly or to result in a hung jury (Saks, 1977). There are conflicting views on whether jurors in a smaller jury participate less (Saks, 1977) or more (Arce, 1995:567). Small juries are more likely to hold secret ballots and to convict (Hans and

Small juries are more likely to hold secret ballots and to convict but they are most unlikely to be a microcosm of society. The real reason for introducing them has been economic concerns.

Vidmar, 1986).¹⁰³ It becomes clear that the real reason for introducing small-size juries has been economic concerns (Zeisel and Diamond, 1987:204). The fact is, of course, that the courts' wish to increase the jury's efficiency and to reduce its monetary cost inevitably has meant tampering with the psychological processes that take place during deliberation. As Wrightsman (1987:260) pointed out, what is also of particular concern is the fact that the US Supreme Court's decision in *Williams v. Florida* – that 6-member juries were constitutionally acceptable (that is, could discharge their responsibility as successfully as 12-member juries) – was handed down on the basis of a misreading of the psychological research results available. In a country with the death penalty such practices by some of its most senior judges are definitely a worry. Equally worrying is the practice of politicians who legislate to change aspects of the criminal justice system that are vital to the defendant's rights in the name of expediency alone and on the basis of limited empirical evidence.

A perception that a small jury is 'okay' because many jurors are not active has been offered as a justification for having smaller juries. However, as Arce (1995:568) points out, there is empirical evidence that "non-active" jurors play a more decisive role in the dynamics of the jury . . . than is commonly conceived' (p. 568). For example, non-active jurors have been found to accept arguments contrary to their initial position (pro guilty or pro not guilty), which in turn produces disequilibrium in the jury by finally swaying the more active members of the group towards a consensus (p. 568).

Regarding how jurors reach agreement, there has been a report of at least one US jury (in the *Oliver North* case) who resorted to prayer to break an impasse in their deliberation (Rosenbaum, 1989).¹⁰⁴ Levine (1992) sums it up well when he states that: 'Social and psychological pressure usually suffices to bring dissenters into line . . . [but] . . . this generalization is too broad; minorities within the jury are not so powerless as they have been made to seem' (p. 155), and it is not unheard of for 'holdouts' to cause a hung jury. According to Levine, jurors have also been found to reach a compromise verdict, to indulge in 'logrolling' (that is, jurors in disagreement with each other trade-off convictions involving multiple defendants; in one case he quotes, a juror took it upon herself to mediate between two opposing groups of fellow jurors (p. 169). Of course, a juror with leadership qualities (who does not have to be the foreperson) can sway even a majority to his/her point of view.

As to the question of why jurors change their minds about the appropriate verdict, according to Pennington and Hastie (1990:100), jurors do so primarily because they are influenced by information about legal issues or how legal definitions or instructions should be applied to the evidence, rather than information about the evidence and its implications for what had happened during the crime events. The trial judge can influence the verdict of the jury by, for example, sending them back to the jury room repeatedly until they reach a unanimous verdict or even by giving them a sermon (known in some parts of the United States as an

‘Allen Charge’) on the importance of reaching a verdict if they seem unable to do so (Levine, 1992:165).

5 DEFENDANT CHARACTERISTICS

Defence lawyers often advise their clients to look presentable in court and to watch their demeanour. But does research support such commonsense beliefs? A number of studies have reported that a defendant’s *attractiveness* is a good predictor of defendant guilt in mock-jury studies (Bagby et al., 1994)¹⁰⁵ and whether mock jurors will apply the reasonable doubt standard (MacCoun, 1990). Interestingly, jurors have been shown to be harsher on an attractive defendant whose good looks enabled them to commit a deception offence (Sigall and Ostrove, 1975). Of course, as Sealy (1989:164) has pointed out, a defendant’s attractiveness is not a variable that can be controlled in a trial. Furthermore, in an actual trial a perception by jurors that a defendant is ‘attractive’ is the result of a process, sometimes over weeks or even months, of watching and listening to him/her and not on the basis of subjects being allowed a brief look at a photograph as part of an experiment. A mock study by Warling and Peterson-Badali (2003) with jury eligible adult subjects found that, when deciding alone, jurors gave a juvenile defendant a shorter sentence than an adult defendant. However, the *age* effect disappeared as a result of jury deliberation. Regarding a defendant’s display of *remorse* in the courtroom, Devine et al. (2001) concluded that, on the basis of the review of the relevant studies, no conclusions are possible due to conflicting findings reported.

6 VICTIM/PLAINTIFF CHARACTERISTICS

According to Devine (2001), there is no evidence from studies of criminal trials that the *victim’s suffering or attractiveness or age* are significantly related to jury verdicts. Barnett (1985) did find that juries in Georgia were more likely to impose the death penalty when the victim was a *stranger* to the defendant and, finally, Daudistel et al. (1999) reported that longer sentences were imposed when the victim and the defendant were of the same race (for example, white vs Hispanic). One of the worrying findings yielded by the Capital Jury Project in the United States is that jurors see the defendant as more dangerous if the victim is white and that the race of the victim plays a significant role in whether they find mitigating factors that would lead them to decide on a lesser sentence than the death penalty. Thus, in the case of a defendant charged with killing a white victim, jurors would be unlikely to find mitigating factors and would decide on the death penalty. Regarding the importance of plaintiff characteristics in civil trials, an interaction effect between a victim’s *age* and *race* has been reported by Foley and Pigott (1997) who found that when the plaintiff was young jurors considered African–American plaintiffs as less responsible and awarded them more damages than white plaintiffs in a sexual assault case. However, the reverse was found when the plaintiff was older.

7 INTERACTION OF DEFENDANT AND VICTIM CHARACTERISTICS

As documented in the next chapter, there is overwhelming evidence that blacks in the United States are disproportionately sentenced to death by juries (Baldus et al., 1998). Furthermore, black defendants who kill white victims are significantly more likely to be sentenced to death than white defendants and black defendants guilty of killing black victims.

8 LAWYER AND JUDGE CHARACTERISTICS

The importance of lawyer and judge characteristics as far as trial outcome is concerned has been neglected by psycholegal researchers. Blanck (1985) had observers rate judges' verbal and non-verbal behaviour using videotaped parts of their instruction to the jury and found that the defendant was more likely to be found guilty if the trial judge was rated as less dogmatic, less wise, less dominant and less professional. Regarding the importance of lawyer characteristics, McGuire and Bermant (1977) reported that a higher acquittal rate was associated with the defence lawyer being a male. Lawyers' behaviour in court can sometimes be annoying and even offensive. Kaplan and Miller (1978) found that jury deliberation eliminated any adverse effect (for example, bias) the annoying or offensive behaviour of lawyers or judges might have for or against the annoying party. Finally, as far as *trial tactics* are concerned, Spiecker and Worthington (2003) carried out a simulated civil trial and found that using a mixed organisational strategy (that is, a narrative opening statement and a legal expository closing argument) was more effective for the plaintiff, whereas either a mixed or strict legal expository organisational strategy was more effective for the defence.

CASE STUDY

Prosecution promises evidence in opening statement to jury that is not subsequently adduced

In *R v. Letizia*¹⁰⁶ the defendant was charged with offences of deception and fraudulent trading in relation to his business concerns and personal financial situation. The prosecution case was that, while transferring his company X and its insurance cover to two other companies, the defendant had failed to declare that company X had been declared insolvent. Subsequently, property traced to company X was destroyed in a fire and a flood and the insurance paid a sum pursuant to the policy. During the

prosecution's opening speech, counsel indicated that evidence would be called to the effect that the defendant had, somehow, contributed to the damage to the property. Fifteen weeks into the trial, no evidence had been adduced to support prosecution counsel's opening statement. Counsel for the defendant applied to the court to discharge the jury on the basis that the prosecution's opening statement was prejudicial. The defendant was convicted and appealed against conviction on the grounds that the judge had wrongly refused to discharge the jury. The Court of Appeal (Criminal Division) on 7 February 2006 held that the jury had not heard evidence they should not have been aware of, the opening statement by the prosecution had been made 3 months earlier and, therefore, the conviction was not unsafe. The appeal failed.

9 HUNG JURIES

Despite the concern by some that in a number of trials there is a hung jury, the meta-analysis of 17 studies by Saks and Marti (1997) found that in real-jury trials a hung verdict occurred in only 1 per cent of the instances. The study of criminal cases involving state offences in New South Wales in Australia during the period 1997–2000 by Baker et al. (2002) reported that out of 2771 jury cases for this period 91.8 per cent reached a verdict, 9.8 per cent were aborted and 8.3 per cent were hung. Thus, it appears that significantly more jury trials fail to reach a verdict in Australia than in the United States. In order to remedy this weakness in the judicial system legislators on both sides of the Atlantic have allowed smaller juries (see *Williams v. Florida*, 399, US, 78–145 [1970]) and majority verdicts (10 out of 12) in England and Wales. In Spain, a non-guilty verdict requires a majority verdict of 5 out of 9 and a guilty verdict 7 out of 9 votes in order to eliminate hung juries (Arce et al., 1999:244). Also, since the case of *Allen v. U.S.*, 164, US, 492 (1896), a judge can ask jurors to reconsider their verdict in order to avoid a hung jury. The weight of the empirical evidence¹⁰⁷ indicates that larger juries deliberate for longer (Saks and Marti, 1997) and the number of hung juries increases with jury size when a unanimous verdict is required and when case complexity is high. In Arce et al.'s (1999) Spanish mock-jury it was conceded that hung juries 'are inefficient with reference to the content and style of deliberation. In contrast, unanimous juries... aim to integrate the evidence' (pp. 256–7). It was also reported that occasionally, majorities are intransigent and that it was more likely that intransigence was related to a non-guilty verdict, rather than being attributable to minorities (p. 257). The same authors urge judges to instruct the jury to discuss specific issues, to focus on verdict-evidence relationships, to avoid destructive messages and to avoid trying to force minorities to conform.

10 MODELS OF JURY DECISION-MAKING

According to Hastie (1993b), there are basically four descriptive models of jury decision-making (see Levett et al., 2005:370–375 for an account): (a) the Bayesian probability theory model (see Hastie, 1993b:11–17); (b) the algebraic weighted average model (Hastie, 1993b); (c) the stochastic Poisson process model (Kerr, 1993); and (d) the cognitive story model (see Pennington and Hastie, 1993). Thus, we have two broad categories of models of jury decision-making: the mathematical approach ones and the explanation-based/cognitive approach model. Several studies have failed to find support for the Bayesian model (Schklar and Diamond, 1999; Smith et al., 1996). The algebraic model (Ostrom et al., 1978) draws on information integration theory and posits that jurors assess and weigh each item of evidence presented during the trial and decide on guilt in a criminal, or liability in a civil, trial by averaging their evaluations of the different pieces of evidence. One implication of the algebraic model is that it may well be advantageous for lawyers to present only their strongest evidence. Moore and Gump (1995) reported some support for the algebraic model. According to Kerr (1993), ‘The word stochastic derives from a Greek root that means random, chance, or haphazard’ and ‘Stochastic models . . . characterize processes as probabilistic or chance events . . .’ and ‘predict a set of possible responses weighted by their probability of occurrence’ (p. 116). Unlike the probability and algebraic models, the stochastic model accounts for error variance in juror decision making but, like them, it fails to address adequately the complicated process of juror decision-making (Levett et al., 2005:373). One limitation of mathematical models of jury decision-making is that they do not cater for jurors’ own ‘explanation’ that mediates between evidence and verdict (Pennington and Hastie, 1990:95).

In contrast to mathematical models, the story model (see Hastie et al., 1983; Pennington and Hastie, 1986) assumes that jurors actively construct explanations for the evidence presented to them and decide on a verdict accordingly. In constructing a story, jurors use three types of knowledge, namely: (a) personal knowledge about the offence; (b) knowledge acquired through the evidence presented during the trial; and (c) their own knowledge or expectation about what constitutes a complete story. It is thus possible for two members of the same jury, exposed to the same evidence, to arrive at a different verdict because of differences in how they have understood and interpreted the same evidence. In other words, the process by which jurors selectively pay attention to, interpret and remember evidence and justify their verdict is an active and a dynamic one. Consequently, if a juror believes that the defendant is guilty, he/she will construct a story that will be consistent with the preferred verdict, or as Stephenson (1992) puts it, a juror’s perception of the evidence, their preferred verdict and story construction ‘reciprocally influence one another’, and, ‘There is a story behind every verdict’ (p. 196). As might be expected, the more stories put forward early on in a jury’s discussion, the longer the deliberation taken to reach a verdict, and the greater the likelihood that there may be a

hung jury (p. 197). Finally, insofar as the media construct narratives of celebrated trials before, during and after trials, they have the potential to influence jurors' own stories of the trials and, ultimately, the verdict (Stephenson, 1992:200). Pennington and Hastie (1992) used the story model successfully in three experiments to explain juror decision-making.

11 REFORMING THE JURY TO REMEDY SOME OF ITS PROBLEMS

Having to recall evidence by witnesses, lawyers and expert witnesses provided days, weeks or even months earlier, means the chances are jurors will remember some of the facts about the case better than others and/or they will be confused about what exactly had been presented and/or explained to them in court (McEwan, 2000: 112). Poor comprehension and poor memory for the salient facts of the case, such as the legal definition of the offences and details of witness testimony, have been shown to be associated with deviant verdicts (Hastie et al., 1983). Not surprisingly, therefore, there have been a number of procedural innovations in a number of jurisdictions aimed at enhancing the jurors' competence in complex trials. These innovations include: amending the Contempt of Court Act of 1981 to permit research with real jurors in England (as recommended by the Runciman Royal Commission, 1993, but not by the Auld Committee in 2001); allowing jurors to ask questions during the trial and to take notes to discuss evidence among themselves, to have access to trial transcripts, to pre-instruct jurors, and rewriting and standardising judge's instructions to the jury. Evidence in support of jurors taking notes was reported by Penrod and Heuer (1998) in their juror study in Wisconsin. They found that note-taking did not affect the length of jury deliberation or juror verdicts. The New Zealand juror survey by Young et al. (1999) found that note-taking helped jurors during their deliberations. Horowitz and ForsterLee (2001) had mock jurors view a videotape of a complex civil trial involving multiple plaintiffs. They found that: (a) those jurors who were allowed to take notes were able to distinguish among differentially worthy plaintiffs when deciding on compensation awards; and (b) note-taking was significantly more effective than access to trial transcripts in increasing jury competence. Further support for allowing jurors to ask questions during the trial was also reported by Penrod and Heuer (1998), who found in their study that jurors felt better informed and in a better position to reach a verdict as a result of having been allowed to ask questions. However, Penrod and Hastie also found that judges and lawyers were not positive about jurors being allowed to ask questions. Hannaford et al. (2000) examined the effect of a civil jury reform in Arizona that allows jurors to discuss evidence among themselves during the trial. They also used a questionnaire to survey judges, jurors, attorneys and litigants and found that while permitting jurors to discuss the evidence made no difference to the degree of judicial agreement with jury verdicts, it affected the degree of certainty

jurors reported about their preferences at the start of the deliberation, the level of conflict on the jury and the likelihood of reaching unanimity.

The 2001 Auld Committee's *Review of the Criminal Courts of England and Wales*, chaired by Lord Justice Auld, put forward a number of recommendations to make juries more representative, namely:

- excluding from jury service only convicted criminals and the mentally disordered. Thus, judges, lawyers, doctors and members of the armed forces, for example, will be eligible for jury service
- excusing a juror who knew someone in the case
- drawing potential jurors from all those entitled to be on the electoral register, not only those who are actually on it
- instead of two weeks, jury service could be defined as one trial or even one day
- the jury summons process should be made friendlier, include briefing packs and a video
- while waiting, jurors should have facilities such as computers in order to be able to work and bleepers to go shopping.

Additional recommendations by the *Auld Report* include a right of appeal against 'perverse' jury verdicts and allowing judges or the Court of Appeal to examine alleged improprieties in the jury room. A proposal to have at least three jurors from an ethnic minority group in trials where race is an issue was quickly rejected by the British Government (Gibb, 2001). In view of the findings reported about New Zealand judges by Ogloff et al. (2006) and Young (2004), New Zealand is a good example of a country where increasingly more judges aid jurors in the difficult task by better introduction to the task at hand, with written aids, allowing access to transcripts of testimony, guidance on foreperson selection and on how to avoid impasses in deliberations, by requiring juries to reason their verdict and, finally, providing jurors with a special verdict form to help in the process. Judges should provide jurors with such a list of questions that answering them will result in a reasoned/justified verdict, as juries are required to do in Spain and Russia (Martin and Kaplan, 2006:73). In fact, in Spain the list of questions is called *el objeto del veredicto* ('the object of the verdict').

The well-known English judge Lord Denning (1982:77), Master of the Rolls, argued for a new way of selecting jurors in England because he believed the ordinary man is no longer suitable to sit on the jury. He has also argued that there should be a qualification for service as a juror so that a jury would be 'composed of sensible and responsible members of the community. It should be representative of the best of them of whatever sex or colour and of whatever age or occupation . . . Those on the jury list should be selected in much the same way as magistrates are now.' He also argued that people could apply or be recommended to go on the jury list and they should need to provide references and be interviewed for suitability. Finally, Lord Denning also suggested that the function of magistrates (the vast majority of whom are justices of the peace, see Kapardis, 1984) should be to make up the jury list for their neighbourhood. Only if jurors were selected in the way he proposed should

the jury be retained in the UK, he maintained; otherwise, it should be replaced by a trial by judge and assessors (p. 77). Lord Denning's radical proposal for jury reform seems to have gone largely unheeded.

12 ALTERNATIVES TO TRIAL BY JURY

In the light of some of the arguments against the jury mentioned earlier in this chapter, an obvious alternative to trial by jury is trial by a single judge. This is already available in many jurisdictions. A second alternative is a combination of judge and jury as it exists in Germany, for example, where a presiding judge sits with two lay judges. In the 'Schlöffengericht' court responsible for moderate-serious offences, two lay judges and three professional judges sit in the criminal division of the district court which deals with serious and capital offences (Bliesener, 2006). In May 2009, Japan introduced a mixed-jury system, comprising six lay persons and three professional judges to deal with offences punishable by life imprisonment or the death penalty. Lord Denning (1982:72–73) was a strong advocate of a mixed jury for fraud trials in England, comprising a High Court judge and two lay assessors. Some commentators have questioned whether in a mixed jury the lay persons would outvote the judge often enough (Knittel and Seiler, 1972). Arce et al. (1996) reported a study of one such jury system in Spain (the *escabinato* jury), which concluded that the loss of a jury of peers only implies the dominance of the judge's opinion. In fact, research cited by Antonio and Hans (2001:69) shows that mixed courts limit the impact of lay participation on decision making because lay judges are often marginalised when they hear and decide cases with professional judges (Kutnjak Ivkovich, 1999 and Machura, 1999).¹⁰⁸ This explains, perhaps, why some authors have suggested that the mixed jury is the first step in the process of self-eradication of the jury (Gisbert, 1990). Of course, the number of lay persons can be greater in order to counter any undue influence of the judge, as is the case in Russia. As there are arguments for and against a judge sitting alone, another possibility is to have a bench of judges deciding serious cases, as happens in Spain. Once again, it is debatable whether a panel of judges can compensate for not having a jury. What type of trial one prefers would seem to depend on a number of assumptions. While psychologists can enlighten such debates by testing the validity of assumptions about jurors and judges deciding under different conditions, which alternative to jury trials a community might decide to adopt one day is a matter serious enough to warrant resolution by a referendum.

CONCLUSIONS

The concept of the jury in western English-speaking common law countries has been eroded (for example, with the introduction of majority verdict and of 6-member juries) and the use of juries has declined drastically. As McEwan (2003:112) reminds us, trial jurors face a serious problem that does not confront judges, namely, that jurors listen to evidence sometimes over a lengthy period of time without having a

legal context in which to locate it. ‘The law’s mistrust of juries may largely result from the law not taking jurors seriously enough, not giving them sufficient help to overcome some well-known limits on human information processing abilities, and not realizing that most of these limits apply to experts (that is, judges) just as strongly as to lay fact finders’ (Nietzel et al., 1999:44). Despite the problem of both low ecological validity of much mock-juror/jury research as well as conflicting findings reported by experimental simulation and real juror/jury studies, as far as juror competence is concerned, the weight of the evidence discussed in this chapter shows that:

- as trial complexity increases, juror comprehension of the evidence decreases
- both mock and real jurors are unable to comprehend and apply the law or to evaluate scientific evidence proffered by an expert witness, thus negating the very notion of a fair trial
- there is overwhelming evidence that jurors find it difficult to comply with judges’ instructions, for example, to discount a defendant’s involuntary confession or to ignore inadmissible evidence
- scientific’ jury selection, in itself a controversial practice, is not as possible, nor as successful in influencing trial outcome, as some mock-jury researchers and trial consultants would have us believe
- inconsistent findings have been reported by experimental studies on the one hand and research into actual jurors on the other
- a certain degree of scepticism is warranted in considering research findings about the relationship between juror characteristics and sentence due to the fact that simulation studies often lack deliberation and conflicting findings have been reported by mock- and real-juror studies
- juror/jury research should focus more on the interaction between juror and case characteristics
- the empirical evidence casts doubt on the wisdom of having 6-member juries
- the deliberation process plays a more significant role than was reported by Kalven and Zeisel’s (1966) ‘liberation hypothesis’ in their influential pioneering study; and the ‘cognitive story model’ of jury decision-making has been shown to be a very useful one in focusing on juror characteristics, the deliberation process and features of the case under consideration.

Juridic decision-making is an area where psychologists have contributed and will continue to contribute useful knowledge to a vital debate in society. Levine’s (1992:185) verdict on the American jury process is that: it is not representative of the public at large but does inject social values into the decision-making process; finds the law confusing at times and it inevitably reflects ‘stains of the society’; under the circumstances it is doing a reasonable job in deciding trials; and, finally, ‘it is a good institution that could be better’. For their part, Duff and Findlay (1988) concluded that, ‘It seems unlikely that its total abolition will be suggested by its critics or seriously considered by any government in the near future’ (p. 226). The

jury system is far from perfect and needs to be reformed if it is to be improved (Byrne, 1988).

As far as suggestions for reforming the jury process are concerned,¹⁰⁹ Levine (1992:185–92), argues for: allowing jurors to take notes (a measure already adopted in some jurisdictions) and to question witnesses; providing jurors with trial video-tapes; using plain language in instructing them; permitting jury nullification; allowing them to pass sentences in more categories of criminal cases than they can at present; elimination of judges' control over verdicts; increasing juror pay; and elimination of peremptory challenges where they are still allowed. Another important proposal to assist jurors in their difficult task is for judges to provide them with guidance on how to reach a reasoned verdict. A final proposal that has been put forward is for an alternative to jury trial that consists of jurors sitting with judges, as is the case in continental Europe. However, some authors have expressed a concern that the judge will dominate the lay participants (Jackson, 1994).

It is unlikely that we shall see judges and lay persons deciding criminal cases together in American, English, Australian or New Zealand courts in the near future. The notion of the jury has miraculously survived thus far despite its inherent contradictions and waves of attacks by influential opponents. At the beginning of the third millennium, the jury means different things in common law and civil law countries, and in some common law jurisdictions it is almost extinct. Reforms to the jury along the lines advocated by Levine (1992) have been introduced in some jurisdictions but more reforms are urgently needed if we want juries to live up to the jury ideals. Three additional reforms that would appear to be imperative in this context are: (a) make juries as representative as possible of the whole community as far as jury pools are concerned; (b) educate potential jurors for their task by making available to them a short but informative induction course on how to shoulder the responsibility and cope with the demands of being a juror and a foreperson; and (c) legislate to allow researchers, under very strict conditions, access to real jurors before and after the verdict. Finally, serious thought should be given to the view that jurors with specialist knowledge should comprise juries in complex fraud trials.

As this chapter shows, psychologists still have a lot to contribute to improving our understanding of juror and jury decision-making as well as to improving juror competence. If the jury is not reformed enough, there is a real danger that the trial of serious cases by a judge without a jury or a panel of judges will become the norm.

REVISION QUESTIONS

- 1 Why is the jury concept itself problematic?
- 2 The numerous arguments in favour for and against the jury indicate two conflicting views of what the function of the jury ought to be. What are these views?
- 3 What methods have researchers used to study jury/juror decision-making?

- 4 Are we justified in talking about 'scientific jury selection'? If not, why not?
- 5 Which juror characteristics are related to their verdicts?
- 6 How much does a jury foreperson impact on juror/jury decision-making?
- 7 What do you know about 6-member juries?
- 8 How are hung juries different from juries that return a verdict?
- 9 What does the 'story model' assume about juror decision-making?
- 10 If you believe jury reform is needed in your country, what form should it take?

ADDITIONAL READING

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6

SENTENCING AS A HUMAN PROCESS, VICTIMS, AND RESTORATIVE JUSTICE

CHAPTER OUTLINE

- Disparities in sentencing 199
- Studying variations in sentencing 202
- Some extralegal factors that influence sentences 205
- Models of judicial decision-making 218
- Victims 220
- Restorative justice 223

It is a reality in law that the Constitution of the United States protects the right of suspects and defendants but not the right of victims.

(Bartol and Bartol, 2004b:194)

Sentencing cannot be an exact science; indeed, Lady Wootton likened the sentencer to a small boy adding up his sums but with no one to correct his answer.

(His Honour Judge P.K. Cooke, OBE, 1987:57)

Most judges do not read psychology journals or scholarly books; some do not even read law reviews.

(Wrightsman, 1999:viii)

The era of a restorative justice paradigm as a fully-fledged alternative to both rehabilitative and retributive approaches remains very distant.

(Weitenkamp, 2002:326)



INTRODUCTION

Crime and punishment has always been a topic of great interest. The quotes provided reflect some of the controversies surrounding sentencing in contemporary western societies. Judges have been termed ‘the gatekeepers of the legal system’ (Wrightsmann, 1999:vii). Since the 1970s the judiciary in western countries has undergone unprecedented expansion in both its size and power.¹ The expanding judicial role is evident in the appointment, training and scrutiny of members of the judiciary (Malleeson, 1999). At the same time there has been increasing tension between the requirement of judicial independence and accountability created by the changes that have taken place. The reader should note in this context that, as the experience in the UK since the 1990s shows, the growing politicisation of sentencing policy ‘threatens to marginalize principled and empirically based arguments about sentencing’ (Ashworth, 2007:99). According to McGuire (2008), the word ‘sentence’ comes from the Latin word *sententia*, meaning a feeling or opinion someone communicates to others (p. 266). The etymology of ‘sentence’ points to the public nature of sentencing and its expressive function.

Drawing on Van Koppen (2002:193–8) as far as changes in judicial decision-making are concerned, the mechanical view of legal decision-making was not seriously questioned until the latter part of the nineteenth century. Manifesting the mechanical view, a judge would decide sentence in four stages: find out what the facts are, find the relevant law, apply the rule to the facts, and decide what the consequences of this should be. The mechanical view of legal decision-making came under attack by, *inter alia*, Cardozo (1921) who argued for judges to play a more creative role in law so that the law does not remain static but reflects the times we live in. Later on legal realists like Llewellyn and Hoebel (1941) and Jerome Frank (1950) shifted the focus on the more pragmatic aspects, paving the way for research into social and psychological factors that impact on legal decision-making.

Some judges² like to describe what they do as a ‘balancing act’, a concept criticised by Ashworth (2000). From this point of view, a judge tries to balance the often conflicting interests of the community, the offender and the victim. Such an ambitious undertaking, however, raises the issue of inconsistencies in sentencing (see below). The view that sentencing is a science can be found, for example, in the judgement in *Willicroft* [1975]³ in Victoria, Australia. Of the 31 judges interviewed in Mackenzie’s (2005) study of sentencing in Queensland, very few were prepared to describe sentencing as a science, or ‘art’ for that matter, preferring to conceptualise it in terms of ‘balancing’ (p. 20). According to Mackenzie, there is good caselaw⁴ evidence in different jurisdictions in Australia and from her own study that judges consider sentencing more of an ‘art’ (pp. 13–14), a view also expressed by many Canadian judges (Canadian Sentencing Commission, 1987). However, as Mackenzie (2005:16–17) and others have pointed out, conceptualising sentencing as an art implies that the skill involved cannot be taught and learned because it is basically instinctive and intuitive. Finally, while a minority of judges in

Ashworth's (1984) Crown Court study opted for 'intuitive process' in describing the nature of sentencing decision-making, Adam and Crocket JJ in *Willeroft*⁵ in 1975 in Victoria, Australia, stated that 'ultimately every sentence imposed represents the sentencing judge's instinctive synthesis of all the various aspects involved in the punitive process'. This conceptualisation is in stark contrast to the mechanical, rational, 'two-step' approach in which a judge first decides the severity of the sentence on the basis of the proportionality principle and then takes into consideration mitigating characteristics of the defendant. Mackenzie (2005:18) points out that the 'instinctive synthesis' perspective has been criticised by Ashworth (2000) and Tonry (1996) for it seems to assume that judges are the only ones who can know what is the 'right' sentence and sentence in a just way (Mackenzie, 2005:18). If we believe that judicial decision-making cannot be taught, then sentencing inconsistencies cannot be reduced by training judges. However, this viewpoint is negated by the experience on both sides of the Atlantic and in the Antipodes of those sentencing researchers, including the present author, who have been involved in providing magistrates and judges with training seminars and observing the effect of their subsequent sentencing behaviour. It should be noted in this context that, in view of the challenges posed by sentencing today and the fact that, generally speaking, judicial officers in common law countries hardly ever possess any specialist knowledge or qualifications about criminal sentencing, there are very strong arguments for providing them with specialist training, especially newly-appointed ones (Australian Law Reform Commission, 1988:152-4). In addition, such training could also include instructing judicial officers as to how to best deal with the stress that characterises their work but about which many of them prefer to keep to themselves (Justice Michael Kirby, 1995).⁶ In imposing sentences such as terms of imprisonment, judges and magistrates inevitably make policy and can become prison reformers, for example.⁷ A question of interest to both magistrates, judges and researchers alike is whether sentencing is an art or science.

The judiciary worldwide enjoys a great deal of discretion⁸ when it comes to imposing sentences on convicted criminal defendants. In England and Wales, the increasing politicisation, party politics and the severity of sentencing policy through such legislation as the *Criminal Justice Act 1991* under the banner of 'law and order' since the early 1990s, has reduced judicial discretion (Ashworth, 2007:990). Historically, sentencing discretion and the availability of a broad range of sentencing options, both non-custodial and custodial ones, have been largely justified in the name of attempts to rehabilitate offenders (Kapardis, 1985; Victorian Sentencing Committee, 1988). By definition, rehabilitation as a penal aim requires sentences tailored to an offender's needs. This is in contrast to a more structured approach in sentencing known as 'just deserts' in which the emphasis is on fixing a custodial sentence that almost exclusively reflects the seriousness of the crime committed, that is, the offender's deed/s (von Hirsch, 1995). The existence of judicial discretion, however, should not be taken to mean that judicial discretion is not subject to a number

of important constraints and influences (Shapland, 1987). To illustrate, statutes normally provide a maximum sentence for a given offence;⁹ courts in common law countries are obliged to follow precedent and to adhere to certain principles of sentencing (Thomas, 1979). In addition, in many jurisdictions judges and magistrates are provided with sentencing guidelines,¹⁰ produced by dedicated bodies such as the Sentencing Guidelines Council in England and the Sentencing Guidelines Commission in the United States. Sentencing guidelines in Australia and England and Wales, for example, make it clear which are normally the mitigating (for example, a guilty plea – see Douglas, 1988; Willis, 1995) and aggravating factors to be taken into consideration (see Walker and Padfield, 1996), while in the United States there exist more specific sentencing guidelines (Doob, 1995; Frase, 1995). Many people are perhaps more familiar with the Minnesota Sentencing Guidelines Commission, that has been providing model guidelines for the sentencing of convicted felons in order to promote consistency in sentencing for a number of years. Furthermore, in magistrates' courts in England and Wales, the court clerk plays an important role in the form of advice he/she gives the bench (Kapardis, 1985; Corbett, 1987) and there is the possibility of appeal against the sentence. However, it should be noted in this context that magistrates in England have been found to have manifestly 'egocentric bias' (Greene and Ellis, 2007) in being overconfident in how they rank themselves vis-a-vis their colleagues as far as reversal of their decisions on appeal is concerned (Guthrie et al., 2001). In this regard, they are no different to lawyers who have also been shown to be overconfident about the likelihood of winning their cases in court (Goodman-Delahunty et al. 1998).¹¹

Further on the issue of constraints on judicial discretion, members of the judiciary in various jurisdictions participate in sentencing conferences aimed at reducing unjustifiable inconsistencies and are generally expected to provide reasons for their choice of sentence. A strong argument in favour of the judiciary providing justifications for their sentencing is that a sentence impacts directly on the defendant as well as indirectly on the community at large (Ashworth, 2007:992). In fact, the judicial duty of giving reasons for sentence 'stems from the tradition of the continuous oral trial' (Mackenzie, 2005:25)¹² and a strong justification for giving reasons is in terms of both policy and public accountability (p. 26). Furthermore, giving reasons for sentence is mandatory for judges in some cases in certain jurisdictions such as Queensland in Australia (p. 25). In England and Wales, the *Criminal Justice Act 1991* introduced a duty for judges to give reasons for sentences and to explain them to the defendant but only when imposing a custodial sentence. Interestingly enough, however, in *Baverstock*¹³ (1993) the Court of Appeal ruled that a failure to give reasons for sentence did not constitute a breach of a legal duty by a judge. In addition to constraints on judicial discretion, in a number of countries there has been a conscious effort to structure it by the introduction of mandatory sentences, for example.¹⁴ According to Ashworth (2007), it was senior judges, including the chief justice, and some bishops who forced amendments in the House of Lords to a proposal by Michael Howard, Home Secretary in the early 1990s, to introduce

mandatory sentences (p. 990). To the disappointment of many, the Labour Party did not oppose Howard's proposal. Furthermore, according to Ashworth (2000), by implementing the *Crime (Sentences) Act 1997* the Blair Government in England adopted a modified version of the American 'three strikes and you are out' approach in the form of mandatory life sentences, other than in 'exceptional circumstances, for recidivist offenders who have committed certain violent and sexual crimes'¹⁵ such as homicide, causing grievous bodily harm, rape and armed robbery. The Act was consolidated in ss.109–11 of the *Powers of Criminal Courts (Sentencing) Act 2000* and also provides: (a) a minimum mandatory sentence for trafficking in a third class A drug, unless such a sentence would be 'unjust in all the circumstances' (s.3); and (b) a mandatory minimum sentence for a third conviction for burglary of a dwelling.

Sentencing, 'probably the most public face of the criminal justice process' (Ashworth, 2007:990), has been termed the 'cornerstone of the criminal justice system' (Sallmann and Willis, 1984) and the 'visible pinnacle of criminal justice decision-making' (Morgan and Clarkson, 1995:7). The fact is, however, that a lot of negotiation precedes a guilty plea, sometimes even during the trial.¹⁶ The reader should also note in this context that: (a) plea-bargaining is a practice that is more prevalent in the United States than in the UK,¹⁷ Australia or New Zealand (Curran, 1991; Willis, 1995); and (b) there has been enormous growth in non-court penalties such as the infringement notice system with its powerful technological overlay (for example, speed cameras), which has transformed the very concept of sentencing itself (Fox, 1995), as well as in the use of electronic monitoring of offenders, especially youth, in the name of 'community punishment and rehabilitation' (see Raynor, 2007).

Sentencing has been termed the 'cornerstone of the criminal justice system'.

1 DISPARITIES IN SENTENCING

While acknowledging that a large number of criminal cases are routinely processed and disposed of in the lower courts, the task of the sentencer is often not an easy one. There are numerous reasons for this: there exist conflicting penal philosophies¹⁸ (for example, retribution, rehabilitation, deterrence, just deserts, social protection, denunciation, reparation, restoration) and unsatisfactory guidance on how they are to be applied; the judiciary is expected to process cases at a fast rate; the volume of cases coming before the courts has increased over the years (Thomas, 1987); particular pieces of sentencing legislation turn out to be problematic as far as implementing them is concerned (Thomas, 1987); there is public demand for harsher penalties and the field of sentencing is plagued by a lack of consensus on what is meant by a 'right' sentence.¹⁹ This state of affairs is no consolation for judges and magistrates who are often criticised for being either 'too soft on criminals' or for imposing unjustifiably harsh penalties on defendants who have already been victimised enough by an unjust society and its ineffective criminal

justice system. Taking an empirical approach to the question, Farrington (1978) suggested that the 'right sentence' is the one that achieves a given penal aim for a given type of offender most effectively and efficiently, providing a challenge for researchers to enlighten judicial officers and the public alike on the issue of 'right' sentences. Researchers into sentencing, however, have a long way to go before they are in a position to provide judicial officers with such specific advice. From a traditional, narrow (and cynical) legal point of view, the 'right' sentence is the one given by the judicial authority that spoke last and highest on the matter.

While this chapter is concerned with disparities (unjustifiable inconsistencies) in sentencing, it needs to be emphasised that there is a great deal of consistency in sentencing in criminal courts. For example, the Scottish study of consistency and disparity in the custodial sentencing by 10 sheriffs in three courts by Tata and Hutton (1998a), found evidence of broad consistency. More recently, Millie et al. (2007) compared sentencers' decision-making in borderline cases (that is, those on the verge between a custodial and a community-based sentence) in England and Wales and Scotland, matching them on six legally-relevant factors, namely nature of offence, criminal history, response to prosecution, offender's circumstances, offender's condition and 'other'. They found that sentencers reached remarkably similar decisions about sentence, despite differences in the legal systems and criminal justice structures in the two jurisdictions. Of course, such evidence of consistency in sentencing is not irrefutably convincing evidence against the existence of disparities.

CASE STUDY

Disparities in sentencing: a cause for international concern

A random sample of 52 judges in Spain, each with a minimum of one year's experience in Appeal and High Court and with an average age 34.6 years, were given a detailed written transcript of a real trial where the defendant was to be sentenced for raping a woman. Half the judges were against incarceration, 40 per cent were in favour of incarceration and 10 per cent did not respond. Finally, the length of the sentence proposed varied from 5–25 years (Arce et al., 2001:202).

Disparities in sentencing criminal defendants are endemic in the system.²⁰ This is because it is a human system that involves both large numbers of cases and magistrates (more than 30 000 of them in England and Wales; Lawrence, 1993:279), judges, and (in the United States) jurors (see chapter 5). In addition, there are regional variations between urban and rural courts (Douglas, 1992; Hogarth, 1971:370); there are differences in the input to sentencers, in other words, the type

of information about a case that sentencers are provided with (for example, whether there is a pre-sentence report and whether a recommendation about sentencing is made by a probation officer/social worker/psychiatrist), and whether evidence is provided concerning the 'good character' of the defendant.²¹ In addition sentencers differ in how they assess offence seriousness and how much importance they attribute to particular kinds of case information, how they translate offence seriousness into a penalty (Fitzmaurice and Pease, 1986), as well as in how they justify their decision about disposition of the defendant (Hood and Sparks, 1970:154). In addition, as Tata and Hutton (1998b) found in their Scottish study of consistency and disparity in the custodial sentencing by 10 sheriffs in three courts, disparities may be the result of the idiosyncratic approach of one particular sentencer who systematically passes significantly longer sentences than his/her colleagues. Not surprisingly, therefore, inconsistencies in sentencing have been a cause for concern and attracted researchers' interest since the nineteenth century (Galton, 1985).

One of the criticisms levelled against judicial discretion is that it often results in disparities in sentencing (Skyrme, 1979). Unjustifiable inconsistencies in sentencing, a ground for appeal against a sentence (Thomas, 1979), are referred to in the literature as 'disparities'. The concern about disparities in sentencing has been one factor in the shift away from rehabilitation in favour of just deserts, as the dominant penal philosophy in some western countries has resulted in attempts to structure judicial discretion.²² According to Fox (1987), such attempts fall into two main categories: judicial self-regulation (appellate review, guideline judgements, sentencing councils or panels, judicial training, information services) and statutory regulation (restructuring penalties, presumptive sentencing, guideline sentencing). Despite such attempts (see New South Wales Law Reform Commission, 1996, for a discussion), sentencing disparities continue to be a cause for concern. Evidence for variations in sentencing policy that simply cannot go unnoticed are to be found in British Home Office figures for the 411 Magistrates' Courts in England and Wales. They reveal that, 'despite sentencing guidelines laid down by the Magistrates' Association [1993], serious discrepancies still arise'.²³ Writing about the role of the sentencing scholar, Ashworth (1995) outlines the following six roles: (a) reminding politicians and the judiciary that their decisions have an impact on real people and their liberty; (b) ensuring that the sentencing system does not lose sight of the fact that it must remain committed to the principles of natural justice and to the rule of law (for example, by contributing to attempts to structure judicial discretion and to minimise disparities in sentencing); (c) informing the sentencing-effectiveness debate; (d) contributing to the development of sentencing theory; (e) researching sentencing in both theory and practice; and, finally, (f) providing a framework within which to discuss the role of sentencing in society. The empirical studies discussed in this chapter have been concerned with throwing some light on the factors that underpin disparities in sentencing and can thus be said to fulfil Ashworth's roles (b) and (d). The discussion of empirical evidence that follows concentrates on studies of actual sentencers.

Disparities in sentencing criminal defendants are endemic in the system.

The sentencing stage in the criminal justice process provides a goldmine for psychologists, lawyers and others who are interested in decision making.

There is a large amount of empirical literature on inconsistencies in sentencing and the importance of both legal and extralegal factors in accounting for such inconsistencies. The legal factors identified by Kapardis' (1985:154) literature review of 140 studies as important (that is, that attracted an evaluation score of 2 ('of some importance'), 3 ('important') or 4 ('very important')) in explaining sentencing variation are: type of charge; defendant's criminal record, recency of last conviction, past interaction with the criminal justice system, type of plea, age, gender, community ties; provocation by the victim; whether a court is in an urban or rural area; and probation officer's recommendation about sentence. Such a literature review today would also need to include some courts' use of Victim Impact Statements (VISs) when considering sentence (see New South Wales Law Reform Commission, 1996:418–45). The reader should note in this context that in *Payne v. Tennessee*, 501 U.S. 808 (1991) the United States Supreme Court allowed the admission of VISs during capital sentencing proceedings. However, while the court's decision is to be applauded for allowing the victims' voice to be heard, some authors have argued that VISs prejudice the jury's decision (Myers and Greene, 2004). The extralegal factors identified by Kapardis (1984) are: a defendant's pre-trial status, socioeconomic status (see also Douglas, 1994), race, and attractiveness; the victim's race; a sentencer's age, religion, education, social background, cognitive complexity, constructs, politics, and, finally, penological orientation (that is, whether offence- or offender-focused). There is no doubt that it is the interaction of both specific legal and extralegal factors that best explains disparities in sentencing. Given regional differences in sentencing legislation and the large number of factors that have been found to have the potential to impact on sentence choice and severity, no generalisations are possible, especially not across different jurisdictions or over time.²⁴ Some of the studies of sentencing go back almost 80 years and studies utilising court records preceded experimental simulation studies on both sides of the Atlantic. The sentencing stage in the criminal justice process provides a goldmine of opportunities for psychologists interested in decision making. Furthermore, it is an area where organised psychology (for example, the American Psychological Association) has on a number of occasions attempted to influence judicial policy-making by filing *amicus curiae* ('friends of the courts') briefs (Tremper, 1987).

2 STUDYING VARIATIONS IN SENTENCING²⁵

The sentencing stage in the criminal justice process provides a goldmine for psychologists, lawyers and others who are interested in decision making. In this context seven research methods have been used by studies of sentencing variations that can be grouped as follows (see Kapardis, 1984, 1985, for a discussion of the merits and limitations of the different methods).

Crude Comparison Studies

Crude comparison studies have compared sentences passed by different courts in the same region (Warner and Cabot, 1936), by judges in different regions (Grunhut, 1956) or by different judges in the same court (Morse and Beattie, 1932) and between sentences imposed for the same offence (Ploscowe, 1951).

Random Sample Studies

Random sample studies have simply assumed a random distribution of offence and offender characteristics between different courts and/or different judges, without any justification given for the assumption being made (for example, Chiricos and Waldo, 1975).²⁶

Matching by Item Studies

For matching by item studies, see Hood, 1962; Mannheim et al., 1957; Nagel, 1961; Wolfgang and Riedel, 1975. The number of variables used to match criminal cases in order to compare sentences imposed has varied, for example, from one (Nagel, 1961) to 27 (Wolfgang and Riedel, 1975).

Prediction Studies

Fitzmaurice et al. (1996) and Hogarth (1971)²⁷ are examples of prediction studies. In order to identify the best predictors of sentence severity, some researchers have controlled for a number of offence, offender, victim, court and community variables. To illustrate, Fitzmaurice et al. (1996) used the Parole Index prediction method (see Farrington and Tarling, 1985) to predict a total of eight different types of sentences in 4000 cases, using data on a total of 32 variables with 3975 defendants who were sentenced. They concluded that: 'predicting court sentences was a perilous exercise' (p. 309) and 'the choice between models will be a trade-off and that some disposals will always be difficult to predict especially when the number is small or when the sentencing pattern which underpins them lacks in consistency' (p. 310).

Observational Studies

Aware of the inadequacy of court records, and of the importance in sentencing of information about courtroom interactions which is never recorded by court stenographers, a number of researchers have utilised the observational method (for example, Stewart, 1980).²⁸ A major attack against the observational method was launched by Konečni and Ebbesen (1979), who claimed to have shown that: 'it is a completely inappropriate research tool to study sentencing'. The adequacy of

their own findings, however, is impossible to evaluate as Konečni and Ebbesen failed to provide sufficient information about the number of judges involved in their observational study or the between-judge agreement in sentencing in cases that were not significantly different (Kapardis, 1985:42–3).

Experimental Simulation Studies

It would appear that the first experimental simulation study of sentencing, using real sentencers as subjects, was by Rose (1965). Close examination of 34 such studies on both sides of the Atlantic by Kapardis (1985:44–57) revealed the following: in over half of them psychology students were used as subjects; British studies overall used actual sentencers as subjects but most of the studies suffer from low internal validity; and, finally, only two (Devlin, 1971; Hood, 1972) compared sentence decision-making under simulated and real-life conditions. Hood (1972) reported no differences between the two conditions while Devlin's (1971) limited comparison cannot be said to provide a test of the external validity of experimental simulation.

A comparison of real vs simulated sentencing using 168 magistrates from five different regions in England and deciding in groups of three, with the most senior chairing the discussion as they would normally do in real situations, and nine criminal cases sentenced in the Cambridge Magistrates' Court, provided strong support for the external validity of experimental simulation (Kapardis and Farrington, 1981). It should also be noted that experimental simulation studies of inconsistencies in sentencing as a function of a large number of factors have generally failed to pay adequate attention to the legal context of actual sentencing; such researchers have demonstrated a reluctance, if not an inability, to locate such psycholegal research in the broad context of the contemporary sentencing reform debate.

Interviewing Judges

Judges worldwide have traditionally been very reluctant to be interviewed about their sentencing behaviour. As Mackenzie (2005) has put it: 'The voices of those who actually sentence offenders are very rarely heard, despite the fact that they have much to add to the knowledge and debate in the area' (p. 12). In the present author's experience when interviewing a large number of lay magistrates in England about their sentencing (see Kapardis, 1984), the interview method can throw much-needed light on the human face of sentencing as well as help to identify the factors that are important in accounting for inconsistencies in sentencing. One of the first to interview judges in Britain was Ashworth (1984). In a pilot study, Ashworth and co-researchers conducted interviews with 25 Crown Court judges, in addition to court observations and analysis of 96 cases. Unfortunately, the then Chief Justice of England and Wales did not allow the study to proceed further so it was never finished. A number of other studies using the interview method have also been reported.²⁹

In real life, sentences imposed on criminal defendants can vary from a fine, to a community-based order, to a suspended term of imprisonment or a term of imprisonment or a life-sentence. There is, therefore, a need for a scale to measure sentence severity (see Durham III, 1989; Fox and Freiberg, 1990). Such a scale was reported in the English study by Kapardis and Farrington (1981), who found significant consistency within and between 168 magistrates in their ranking of 12 different disposals across nine cases, in other words, the type of case did not seem to have much effect on their ranking of the severity of penalties (p. 113).

3 SOME EXTRALEGAL FACTORS THAT INFLUENCE SENTENCES

In considering the empirical evidence for extralegal factors, such as a defendant's gender and race, at the sentencing stage in criminal justice one must not lose sight of the fact that the very same factors influence decision making earlier in the process, through, for example, differential access to private legal representation and the existence of stereotypes within the community and among law-enforcement personnel (for example, that a particular minority is more likely to be violence prone),³⁰ factors that can be expected to influence, for example, help-seeking behaviour of ethnic battered women (Raj and Silverman, 2007), the charges laid against a defendant and/or a defendant's ability to bargain his/her plea for fewer and/or less serious charges. Collins (2007) has documented that in multicultural Sydney, Australia, the media focus disproportionately on 'ethnic' crime, especially after 9/11, thus reinforcing negative stereotypes of ethnic communities. According to McCarthy and Smith (1986), therefore, there is a need to view and account for sentencing in a structural context. Let us next take a close and critical look at the empirical evidence for the importance of a few interesting factors in sentencing disparities.

Defendant's Gender

Gender bias is endemic in many a society. In India, the gender asymmetry in the country's population reflects the fact that every day thousands of female foetuses are murdered by their parents because women are considered second-class human beings, children of a lesser god, an economic drain on the family due to the fact that families have to pay expensive dowries at the time of their marriage.³¹ A defendant's gender is stated as a relevant consideration in deciding the sentence to be imposed in both statutes and in common law in the United States, UK, Australia and Cyprus, for example.³² The classic example of gender as a legally relevant factor in criminal law is infanticide, an offence that can only be committed by women (Laster, 1989). It is, of course, questionable whether a criminal defendant's gender *per se* should be the basis for disparities in sentencing.

Gender bias and the law and the administration of criminal justice have been issues of concern for a number of years now. Feminist authors have argued that the

theoretical underpinnings of the law are in many instances biased in favour of men and that the judiciary is guilty of sexism. In the context of sentencing, it has been argued that sexism operates to reinforce traditional gender roles and manifests itself in a paternalistic approach that aims to protect the social institution of the family (Daly, 1987).³³ It has also been argued that the courts portray men as breadwinners in contrast to females, who are seen as dependants and domestics, a perception that encourages gender inequality before the law; that female defendants are perceived as psychologically disturbed deviants (Gelsthorpe and Loucks, 1997), even though the evidence for such assessment is often weak or questionable (Henning, 1995). Of course, sex discrimination has been outlawed in a number of countries.³⁴ Contrary to the view that 'double deviant' women in Victorian England were sentenced more harshly than their male counterparts, Godfrey et al. (2005) analysed court data and newspaper reports on minor assaults prosecuted in 10 magistrates' courts in England between 1880–1920 and found that women who committed similar assaults to men were likely to receive a lighter punishment. Godfrey et al. concluded that their findings about significant gender bias in sentencing lower-class men indicates that local magistrates considered assaults by women as less important than assaults by men and, furthermore, by their sentencing practice tried to 'civilise' lower-class communities at 'dangerous masculinities'. Their conclusion, however, should be treated with caution because they had no data on defendants' age and previous convictions. But what is the evidence for discrimination for or against women at the sentencing stage?

Statistics on women and the criminal justice system in England and Wales published by the Home Office (2005) show that between 1992 and 2002 the average female population in prison increased by 173 per cent but the male prison population by 50 per cent. For Ashworth (2000:203), examination of criminal statistics for England and Wales indicates that the judiciary discriminates in favour of women and against men, while for others 'the evidence suggests that courts are imposing more severe sentences on women for less serious offences' (Home Office, 2004:3); furthermore, it is changes in the custody rate and not in the offending rate that explain the imposition of harsher sentences on women for less serious offending. However, caution is warranted in drawing conclusions on the basis of such statistics because women in Britain are more likely than men to commit theft, to be sentenced by a lower court (Magistrates' Court) and to be first offenders (p. 204), if recidivists, to have fewer previous convictions and to be less likely to have independent means to pay a fine (Gelsthorpe and Loucks, 1997). Finally, as Gelsthorpe and Loucks found, courts may be reluctant to fine female defendants because it would make their child-care responsibilities more difficult (see Heidensohn and Gelsthorpe, 2007, for detailed discussion).

In an interesting study of judges' verbal statements in real courtroom settings by Fontaine and Emily (1978) it was found that judges gave reasons for their choice of sentence more often in the case of male than female defendants. In addition, judges sought information about the defendant's circumstances when having to sentence

females but about the crime when dealing with males, an indication, perhaps, that the judges considered offending by females as out-of-role and, consequently, focused more on the type of woman she was and her motives. In the case of male offenders, judges considered their behaviour 'normal' and, consequently, focused more on the seriousness of the crime than on the type of individual involved and his/her circumstances. Judicial officers' own 'theories' of criminal behaviour and their penal philosophies would seem to bias how they perceive a case before them, what information about the case they emphasise, what additional information they seek and how they justify their decision about sentence (Hogarth, 1971; Kapardis, 1984; Oswald, 1992).

With one exception, British studies of gender differences in sentencing have reported that female defendants receive more lenient sentences.³⁵ Kapardis' (1985: 105–8) examination of three earlier British studies³⁶ came to a similar conclusion. Farrington and Morris' (1983) study of sentencing in the Cambridge Magistrates' Court used the penalty-severity scale developed by Kapardis and Farrington (1981) and is the only one to have found no gender differences when taking into account offence seriousness and previous convictions. In the absence of a study of other Magistrates' Courts using the same methodology as Farrington and Morris (1983), it is impossible to say whether their negative finding reflects idiosyncratic sentencing practices of the one particular bench of magistrates in Cambridge. The British empirical evidence for gender disparities is all the more convincing when remembering that it has involved studies of both magistrates' courts and crown courts, a broad range of offences and offenders and, finally, different research methods. Wilczynski and Morris (1993) analysed data on 474 cases in which a child had been killed by a parent and found that female defendants were significantly more likely to be convicted of manslaughter rather than murder, to be dealt with on the basis of the defence of diminished responsibility and to receive significantly more lenient sentences, especially non-custodial ones. The leniency of treatment was especially evident for the women convicted of infanticide – none of them were incarcerated. Wilczynski and Morris concluded that labelling such women's killings as 'abnormal' behaviour which contradicts sentencers' perception of women as 'inherently passive, gentle and tolerant . . . nurturing, caring and altruistic' and that a woman 'must have been "mad" to kill her own child' (pp. 35–6), results in lenient treatment by the courts.

The relationship between gender and sentence severity has also proven problematic for American researchers. Regarding the disposition of civil cases, Goodman et al.'s (1991) jury simulation study of wrongful death awards found that male descendants were awarded substantially higher monetary damages than were their female counterparts. Goodman et al. explain their finding in terms of males enjoying a higher estimated lost income than females. Studies of the importance of gender at the sentencing stage in the United States have reported rather contradictory findings. Fourteen of them have found female defendants to be treated more leniently

Studies of the importance of gender at the sentencing stage in the United States have reported contradictory findings.

by the courts.³⁷ Eight other researchers, however, have reported no significant gender differences in sentencing.³⁸ Finally, Feely's (1979) study in Connecticut, like Hampton's (1979) in New Zealand, reported that female offenders were sentenced more severely. Analysis by Cauffman et al. (2007) of the sentencing of 1355 juveniles aged 14–18 years by the Philadelphia and Phoenix juvenile courts reported that males were consistently more likely than females to be placed in secure confinement and, in Phoenix, to be transferred to adult court. Taking into account the quality of the methodology used by researchers, Kapardis (1985) concluded that a defendant's gender is an important factor in sentencing on both sides of the Atlantic (p. 154). The more recent research mentioned above has not altered that conclusion.

Defendant's Race

'The clearest application of the principle of equality before the law is that no person should be sentenced more severely on account of race or colour' (Ashworth, 1998: 199). Racial discrimination, of course, also occurs earlier on in the criminal justice process and such minorities are disproportionately represented in criminal statistics (see Phillips and Bowling, 2007, for detailed discussion), are differentially treated by the criminal justice system:³⁹ stop-and-search police practices (see Scarman, 1981, and chapter 10 in this volume), how effective is a police investigation of a racist murder,⁴⁰ the decision to arrest, to charge, and to grant bail. Furthermore, there are also differences in criminal victimisation. Interestingly enough, Miller (2007) reported that in St Paul, Minnesota, the victimisation of immigrants increases as they seek to acculturate into society.

The main aim of a lot of sentencing legislation in the United States since the late 1970s (for example, *Washington Sentencing Reform Act 1984*) has been to reduce sentencing disparities by means of determinate sentencing whereby the likely penalty severity is determined by the seriousness of the crime and the number of previous and concurrent convictions of the defendant.

Research into race and sentencing has been reported in Canada,⁴¹ Australia⁴² and New Zealand.⁴³ Regarding the treatment of Aborigines in Australia by the criminal justice system, Indigenous people have an imprisonment rate that is thirteen times higher than that of non-Aborigines. Walker and McDonald (1995) claimed, on the basis of national prison data, that courts in Australia 'may have a lenient view of indigenous offenders, biasing sentence lengths in their favour to avoid accusations of racial biases in sentencing' (p. 4). However, taking into account prisoners' 'most serious offence', when comparing 'average aggregate sentences' of Indigenous (that is, Aboriginal and Torres Strait Islanders) and non-Indigenous offenders is not convincing evidence that Indigenous defendants are treated more leniently by the courts, as Walker and McDonald claim. A recent study of racial bias in sentencing in New South Wales, Australia, by Snowball and Weatherburn (2007) took into account nine legal factors and found that: (a) courts place less weight

on the prior criminal record of an Indigenous than a non-Indigenous defendant; and (b) even after controlling for all nine legal factors, Indigenous status (that is, being Aboriginal) was a significant predictor of imprisonment. While accepting that no single study can control for all relevant legal factors, the fact is that in order to provide a satisfactory account of sentencing practices and whether racial discrimination (negative or positive) exists, a number of additional relevant and important legal variables (for example, criminal record, type of plea, community ties, etc.) should be taken into account as well as a broad range of personal and social characteristics that have been shown to impact on sentence severity (Kapardis, 1985:63–155).

British researchers did not start looking into the possibility of racial discrimination at the sentencing stage until the late 1970s. Most of the published empirical studies have failed to find a positive relationship between a defendant's race and penalty severity.⁴⁴ Mair (1986) did find, however, that blacks were less likely to be given probation than whites. Given that a recommendation is more likely to be made in the case of a defendant with community ties, such as being in employment (Kapardis, 1985:154), Mair's tentative finding (due to his rather small sample) may well reflect black defendants' greater likelihood of being unemployed at the time of the trial (see Halevy, 1995:269).

Hood's (1992) study (in collaboration with Graca Cordovil) was undertaken for the Commission of Racial Equality and analysed data on all cases (2884 males and 433 females) tried in 1989 at five crown court centres in the West Midlands. Taking into account 16 factors related to both the offences and the offenders' criminal records, it was found that black men were 5–8 per cent more likely to be sentenced to a term of imprisonment than white men with similar antecedents convicted of the same crimes; Asian men were slightly less likely to be incarcerated than similarly placed whites. Blacks and Asians were more likely than whites to have pleaded not guilty, and both groups were given significantly greater terms of imprisonment than whites in similar circumstances who had also pleaded not guilty. Hood claimed that 7 per cent of the over-representation of blacks among those imprisoned could be attributed to direct discrimination at the sentencing stage but did not contend that racial discrimination in sentencing occurs systematically and universally. Hood also compared the five crown court centres and found that discrimination against blacks, in terms of the rate of custodial sentences, was much higher at three of them – Dudley, Warwick and Stafford. Despite the fact that some criticisms have been levelled against Hood's study (for example, for failing to control for personal and social characteristics of the defendants being compared; see Halevy, 1995), which Hood (1995) has vehemently refuted, the study can be said to have made a significant contribution to the debate about racial discrimination in criminal justice in Britain (see also Gelsthorpe and McWilliam, 1993; Smith, 1997). In her review of studies of discrimination against ethnic minorities in the criminal justice system in England and Wales for the Royal Commission on Criminal Justice, Fitzgerald

Researchers in England and in the United States have found that sentencing decisions are influenced by a defendant's race.

(1994) points out that: (a) researchers have tended to include in one category people from the Indian subcontinent (Indians, Pakistanis and Bangladeshis) as a single 'Asian' group; and (b) that small direct and indirect racial discrimination effects at various stages in the criminal justice system can have a significant cumulative impact. Finally, racial discrimination by British magistrates has been reported by Gelsthorpe and Loucks (1997) to be attributable to magistrates being influenced by the defendant's demeanour in court because they misinterpret the body language of black defendants as 'arrogance' and respond in an unsympathetic way to the defendant (pp. 33–4).

Research into racial discrimination at the sentencing stage in criminal justice has a much longer history in the United States, where some jurisdictions provide for the death penalty for certain crimes. African-Americans have consistently made up 11 per cent of the American population since 1930. US Bureau of Justice statistics show that during the period 1930–84 the execution rate of African-Americans for murder and rape was five and nine times respectively that of whites (Aguirre and Baker, 1990:135). Such figures, of course, do not show that differences in the execution rate are due to racial discrimination. In an attempt to deal with inconsistent findings, Kapardis (1985) reviewed a total of 37 and found that 21 of them reported evidence for racial discrimination but 16 did not. Taking the quality of the research method used into account, it was concluded that 'the weight of the evidence supports the view that non-whites [in the main the research has been concerned with blacks] are discriminated against at the sentencing stage. However, this evidence is not as overwhelming as might be expected' (1985:122). That conclusion, however, should not be used (see Kleck, 1985) to dismiss the argument that courts in the United States discriminate against African-Americans in sentencing – even weak evidence should be a cause for concern, especially regarding the imposition of the death penalty. Since the mid-1980s, Kleck's (1985) additional and well-controlled studies have reported evidence suggesting racial discriminatory practices against African-Americans and, more recently, Hispanics (Nelson, 1992, in New York State; Walsh, 1991, in Ohio; Sweeney and Haney's 1992 and meta-analytic review of the literature of 19 experimental simulation studies).

As in the UK, the issue of racial discrimination does not only apply to Anglo whites vs blacks. Recently, more research has been reported on how the courts deal with African-American and Latino defendants. Bearing in mind that Latinos are now the largest minority in the United States, a study by Schlesinger (2005)⁴⁵ examined the effect of race and ethnicity on pre-trial incarceration decisions and outcomes by type of crime and found no differences in the incarceration outcomes of African-American and Latino defendants (p. 184). However, the findings reported should be treated with caution because, as Schlesinger herself points out, she had no data on rural courts and no information on defendants' 'community ties' (that is, employment status, marriage status, responsibility of dependent children, living arrangements, and residential mobility) that correlate with race and ethnicity and are legally relevant variables. Focusing on within-race sentencing disparities,

Steen et al. (2005) found that in Washington State white offenders who most likely resemble the stereotype of a dangerous offender are sentenced more harshly by the court than other white offenders, while for African-American defendants those who least resemble a dangerous drug offender are differentially treated by the court and are given more lenient sentences. In other words, the courts make exception to the most serious defendants for whites and for the least serious for African-Americans.

The empirical studies mentioned in this chapter show that: (a) very little evidence has been reported, supporting the view that white defendants are treated more harshly than African-American or Latino defendants at the sentencing stage; (b) the weight of the evidence from real-life and experimental studies shows that African-Americans are sentenced more harshly; and (c) the courts in the US discriminate against Latinos in comparison to white defendants. In other words, minority defendants in the United States and, to a lesser extent in the UK, are the object of discriminatory practices by the judiciary in the two countries. While there still remains the issue of the external validity of mock-juror studies (see chapter 5), the studies reviewed in this chapter and the conclusion by Sweeney and Haney (1992) add to the debate about: (a) racial discrimination; as well as (b) capital punishment, and strengthen the concern expressed by a number of authors⁴⁶ that, controlling for legally-relevant factors, a death sentence is more likely to be imposed on African-American offenders by juries in the United States, especially when their victim is white. What is of particular concern in this context is the fact that racial discrimination in the use of capital punishment in the United States, and it also applies to Hispanics (Thomson, 1997), continues unabated, despite attempts by the Supreme Court to thwart it by providing guidelines (*Furman v. Georgia* [1972] 408 US 238; *Gregg v. Georgia* (1976)). An apparent crisis of conscience in the United States (see Wiener and Haney, 2004) is best evidenced, perhaps, by the decision of Governor Ryan of Illinois a few years ago to commute the death sentences of all death row inmates in the State. Finally, the finding by so many researchers that an African-American offender is most likely to receive the death penalty if he victimises a white person adds credence to the claim that ‘capital punishment serves the extralegal function of majority group protection; in other words, the death penalty acts to safeguard (through deterrence) that class of individuals (whites) who are least likely to be victimised’ (Aguirre and Baker, 1990:147–8).

Regarding the controversy surrounding the use of capital punishment by the courts (see Walker, 1987:84–93), it should be noted that supporters of capital punishment as the appropriate sanction in order to reduce the incidence of such crimes as murder, rape and terrorist offences, basically assume – wrongly – that the serious violent offenders involved act rationally. To ‘deter’ means to discourage someone from offending through fear of consequences (Walker, 1980). In other words, deterrence theory assumes a rationally thinking potential offender. However, as Walker (1980) points out, deterrence is inapplicable when: people do not commit certain crimes because it is against their moral scruples; the behaviour involved is impulsive (as is often the case in homicides and armed robberies

(see Kapardis, 1989; Kapardis and Cole, 1988) or compulsive; people intentionally commit a crime to defy the law or because they are desperate, or because they are prepared to die for a cause (as is the case with suicide bombers); or, finally, when people believe they can commit a crime and remain unpunished. Penologists make a distinction between individual deterrence (that is, the penalty is directed at an individual offender convicted by the court in order to 'teach him a lesson') and general deterrence (that is, when it is hoped that by punishing severely those who are convicted and publicising the penalty imposed others will be discouraged from perpetrating the same crime). Penologists also inform us that for a deterrent to be effective, a combination of penalty severity and high subjective probability of a person being apprehended and convicted by the courts is required in most cases (Walker, 1980).

The available empirical evidence in criminology shows that capital punishment 'is no more effective as a general deterrent than long incarceration' (Walker, 1987:64). For their part, some advocates of the death penalty maintain that it is the deserved punishment for certain crimes and/or that it is the most effective way of preventing a serious violent offender from re-offending. Opponents of the death penalty, on the other hand, argue that: to allow that particular State to deliberately execute a convicted offender is no more justifiable than the crime he/she has committed; 'it transforms assassins into martyrs, alienates ethnic communities who suspect discrimination and is bad for the morale of prisons' (Walker, 1987:64). Undoubtedly, one of the strongest arguments against capital punishment is that miscarriages of justice are known to have occurred and innocent persons have been executed. In addition, as the previous chapter and this chapter show, sentencing decisions, whether by magistrates, judges or juries, are influenced by non-legal factors, including the defendant's race. Finally, a question that many consider problematical is the extent to which, if at all, the judiciary (or juries in the United States) should take public opinion into account in deciding sentence severity generally and the imposition of the death penalty in particular (see Harlow et al., 1995).

Ashworth (2000) has argued that: 'The problem of race in sentencing must be seen at two different levels, at least. First, there is the broadest level of social policy: unless there is an end to racial discrimination in society, it is likely to manifest itself in criminal justice no less than elsewhere. . . . Second, there is the level of criminal justice policy' (p. 203). Ashworth advocates the following measures in order to reduce racial discrimination in sentencing:⁴⁷

- increase the proportion of people from ethnic minorities who work in the police, the courts and the probation service
- increase relevant training to criminal justice personnel
- increase racial awareness training for the judiciary
- greater monitoring of sentencing decisions – a reform also suggested in 2001 by the Auld Committee.

Defendant's Attractiveness

Defendants are often advised by the lawyers to look 'presentable' when appearing in court. Likewise, people are generally given the same type of advice when going for a job interview. The assumption is that magistrates', judges' and jurors' decision-making, like that by members of the public, is influenced by a person's appearance. From a legal point of view, of course, such considerations are irrelevant to decisions about guilt and sentence.

It is well established in social psychology that physical attractiveness: is the one characteristic that most determines whether a person will be liked by another (Walster et al., 1966); is equally important to both men and women (Feingold, 1992); is assumed by most people to be highly correlated with such other desirable traits as sociability, extroversion, popularity, sexuality, happiness, and assertiveness (Eagly et al., 1991).⁴⁸ In other words, there is a stereotype that 'what is attractive is good'. However, the 'attractive is good' stereotype does not include the same traits across cultures (Wheeler and Kim, 1997). The term 'attractive' can refer to physical appearance or likeability, appeal of one's personality, or both. Social psychologists have also established that physical appearance is an important factor in impression formation. According to Bull (1974), people behave differently in the presence of a well-dressed, as opposed to poorly-dressed, individual. A respectable appearance can act as a buffer against imputations of deviance (Steffensmeier and Terry, 1973). But does a defendant's appearance impact significantly on the sentence he/she receives?

As already mentioned in chapter 5, experimental mock-juror studies indicate that a defendant's attractiveness will lessen harsh punishment but will have the reverse effect if the defendant exploited his/her attractiveness to perpetrate the crime.⁴⁹ The classic jury study by Kalven and Zeisel (1966) reported that American judges attributed 14 per cent of their disagreements with the jury to jurors' impression of the defendant, the impression itself alleged by the same judges to have been influenced by whether a defendant was 'attractive'.

Mazzella and Feingold (1994) suggested that attractive defendants may be held to higher standards for judgement and behaviour and, thus, may be treated more harshly when they do not live up to those standards. A study by Abwender and Hough (2001) reported an interesting interaction effect between the gender of mock sentencers (students) and defendant attractiveness in an experiment that used a vignette describing a vehicular homicide. Female subjects sentenced the unattractive female defendant to more years in prison than the attractive female defendant, while the male subjects showed the opposite tendency (see also the section 'Gender of sentencer' below).

Some studies of real sentencers also suggest that highly physically attractive/socially respectable defendants promote sympathy and attract more lenient sentences

The relationship between a defendant's attractiveness and sentencing severity remains unclear due to contradictory findings.

(Finegan, 1978, in Ontario, Canada; Stewart, 1980, in Philadelphia). The validity of Stewart's (1980) findings, however, is questionable because he had no relevant information about the defendants in his sample. An Australian study of sentencing variations in magistrates' courts by Douglas et al. (1980) found a weak positive relationship between defendants' physical appearance (described as 'well-dressed', 'average' and 'shabby') and likelihood of imprisonment, controlling for legally relevant variables. Douglas et al. (1980) and Konečni and Ebbesen (1979) indicate that attractive appearance does not necessarily correlate with being favourably treated by the courts. The inconsistent findings reported by studies of real sentencers do not allow any conclusions to be drawn about whether an attractive physical appearance is a positive asset for an offender at the sentencing stage in criminal justice as experimental psychologists and practising lawyers would claim.

The Sentencer

The title of the present chapter focuses attention on the undisputed fact that members of the judiciary are human beings like everybody else, with all that this entails. Any effort to deal with unjustifiable inconsistencies in sentencing cannot afford to overlook this, nor can it afford to overlook the fact that the 'chief formative influence' on sentencing practice in magistrates' courts is the sentencing culture of the Bench to which a magistrate is appointed and into which he/she is socialised (Cavadino and Dignan, 2002:94).

Internationally, a number of concerns have been expressed about judicial officers. As a way of addressing the issue that litigation in the United States takes too long and costs too much,⁵⁰ often due to technical expert testimony and 'battles of the experts', there have been calls to appoint specialist judges. Another concern with the judiciary in the United States who, apparently, are held in low esteem and are paid low salaries,⁵¹ is that some of them behave badly. According to an article in the *Economist* (30 June 2007), a judge in New York was censured for jumping down from the Bench during a trial, taking off his robes and challenging a defendant to a fist-fight. In Colorado, a male judge resigned after admitting having sex with a female prosecutor in his chambers and in Oklahoma a judge with more than 20 years on the Bench was sent to prison for four years for indecent exposure and for masturbating during trials. The same article discusses more serious cases of judicial misbehaviour involving corruption and puts forward the argument that low pay and partisan elections of judges in the United States are not conducive to judicial integrity. As far as the demographic composition of the judiciary is concerned, an argument has been put forward by Malleson (2006) in favour of an affirmative actions policy in England and Wales in order to remedy the lack of diversity. She also further argues that such policies are not incompatible with appointment to the Bench on merit. Lawyers, convicted offenders, members of the judiciary, researchers and politicians share a belief that the sentence imposed on a

given defendant depends to a significant degree on who the individual sentencer is (Costanzo, 2004; Mather, 1979). It is also commonly known that lawyers indulge in ‘magistrate/judge shopping’ to get one who is likely to be favourably disposed to their case (Ericson and Baranek, 1982), while judges themselves allocate those of their brethren who are known for being tough on crime to courts that hear contested cases (Hagan and Bernstein, 1979). Early ‘crude’ studies of sentencing variations (for example, Everson, 1919) and methodologically sophisticated ones (for example, Palys and Divorski, 1986) have claimed a relationship between sentencer and sentence severity. A few researchers, however, have reported negative findings (Konečni and Ebbesen, 1979; Rhodes, 1977). The role of the sentencer as a determinant of sentence has also received a great deal of attention by Australian researchers, who have reported a positive relationship between the two (Anderson, 1987; Grabosky and Rizzo, 1983; Lawrence and Homel, 1987; Lovegrove, 1984; Polk and Tait, 1988). Douglas’ (1989) study of Victorian Magistrates’ Courts (10 in Melbourne and 38 in the country) involving 27 stipendiary magistrates, also reported a positive but weak relationship between sentencer and sentence.

The importance of sentencer characteristics in sentencing was emphasised by Everson (1919) who concluded in his study of 28 Magistrates’ Courts in New York that, ‘justice is a very personal thing, reflecting the temperament, the personality, the education, environment and personal traits of the magistrate’ (p. 98). On the basis of the existing literature, the following conclusions emerge:

Low pay and partisan elections of judges in the United States are not conducive for judicial integrity.

- Inconsistent findings have been reported concerning the relationship between a magistrate’s social class and their sentencing (Hogarth, 1971; Hood, 1962).
- Lay magistrates in England from small towns are more punitive than their urban counterparts (Hood, 1972).
- Legally trained, as opposed to lay, magistrates in Canada take a more flexible approach to law and focus on the offender in deciding on sentence (Hogarth, 1971).
- Older English magistrates impose severer sentences on motoring offenders (Hood, 1972), older judges in Gibson’s (1978) study discriminated against black defendants the most.

No consistent associations between English magistrates’ social background characteristics (that is, gender, social class and political party affiliation) and their sentencing behaviour were reported by Henham (1988) on the basis of his experimental simulation study. One limitation of Henham’s otherwise interesting study, is that he only investigated associations between two variables at a time and ignored the importance of intervening variables and, also, failed to take into consideration magistrates’ age and education, two characteristics that had been reported by earlier researchers (for example, Kapardis, 1984) as being important in understanding sentencing variations.

Gender of sentencer

In recent years we have witnessed an increase in the number of women in the legal profession and on the Bench in western countries. However, if we consider England and Wales, according to the fifth annual *Sex and Power* report by the Equality and Human Rights Commission (2008),⁵² the equality watchdog, in 2008 there were 99 senior male judges and only 18 senior women judges. In fact, progress to equality at the top echelons of the judiciary is happening at such a slow pace that it is estimated it will take women 55 years to achieve equality.⁵³ According to Heidensohn (1992), women judges⁵⁴ appear to face the dilemma of 'defeminization or deprofessionalization' and, consequently, try to neutralise themselves and their personal style (Thornton, 1996). What, then, is the evidence for a relationship between a sentencer's gender and his/her decision making?

In an archival study Myers and Talarico (1987) analysed data on more than 27 000 cases and found that prison sentences on white and black offenders tended to be longer in courts where female judges presided. They also reported that female judges sentenced rape offenders more harshly than did male judges. Other archival research by Gruhl et al. (1981) found a tendency (though not a statistically significant one) for female judges to impose prison sentences than did male judges. However, another archival study by Kritzer and Uhlmann (1977), like Oswald and Drewniak's (1996) in Germany, also found no differences in the way male and female judges treated male and female offenders; in other words, there was no support for the view that 'chivalrous', paternalistic male judges punish female defendants more leniently.

Bogoch (1999) examined all cases that were decided in the district and magistrates' courts in Israel in 1988 and 1993, with a sample consisting of 868 defendants involved in 747 cases in five different areas. About one-fifth of the cases involved a panel of three judges, and the rest were decided by one judge. There were no trials in which three women judges presided, and women judges participated in less than one-fifth of all the cases (p. 59). In all the trials, there were 20 different female judges and 58 different male judges. Bogoch found that: (a) female judges were significantly more lenient than male judges (p. 60); (b) panels that included women were more likely to impose harsher sentences than men-only panels; (c) when a man was judging, whether alone or in a panel, the sentence imposed on those convicted of sexual offences was significantly higher than that imposed on those convicted of bodily harm offences; but (d) when a woman was judging, especially in a panel, the sentence for sexual offences was lower than that handed down in bodily harm offences (p. 63). Bogoch concluded that: 'if women have a different voice, it is muted in the role of judge. While the leniency of women judging alone may be explained by a gender-related rehabilitative rather than a punitive approach, it may also derive from her still relatively marginalized position in the profession' (pp. 70–1).

But how do female judges sentence female defendants? A survey of 10 500 felony cases in California reported that males judges imposed less harsh sentences

on female offenders than on their male counterparts (Associated Press, 1984).⁵⁵ However, it was female rather than male judges who sentenced female offenders more leniently in Mulhausen's (2004)⁵⁶ study in Pennsylvania. We see that the literature on sex biases in judges' decision-making provides an inconsistent picture about the behaviour of male and female judges. Interestingly, male judges in Illinois were more likely to believe that gender bias is a tactic used in the courtroom, rather than a discriminatory practice (Riger et al., 1995). Regarding the importance of a *judge's race*, Mulhausen (2004) found that African-American judges imposed harsher sentences on African-American defendants than did white judges. Regarding interpersonal relations between judicial officers from different ethnic background, the lay magistrates may not be an obvious choice for a study of racism and discrimination. However, a study by Davis and Vennard (2006) of black and Asian magistrates' experience of racism and discrimination in the court environment of 14 Magistrates' Courts in England and Wales found that 28 per cent had experienced subtle racism, such as careless use of language, inappropriate assumptions about cultural background and casual stereotyping.

Inconsistent findings have been reported regarding not only a sentencer's gender⁵⁷ but also religion,⁵⁸ politics,⁵⁹ penal aims,⁶⁰ and his/her sentencing decisions. In considering the relationship between judges' political affiliation and their decision making, it should be noted that by appointing two young, bright and conservative judges to the Supreme Court, President Bush succeeded in shifting the court significantly to the right and, consequently, impacted on domestic policy for years because of the Supreme Court's response to reform of immigration and social security.⁶¹ Finally, examination of Britain's *Industrial Relations Act 1971* and the correspondence between the President of the National Industrial Relations Court and members of the Conservative Cabinet led Spencer and Spencer (2006) to conclude that constitutional law scholars have ignored the extent to which judges may secretly influence politicians because they have concentrated on researching how the executive influences the judiciary. As far as justices of the US Supreme Court are concerned, political scientist Glendon Schubert in *The Judicial Mind* (1965) and *The Judicial Mind Revisited* (1974) advocated that a justice's vote was a function of the relationship between his/her ideological position on the issue at hand and the type of case involved.

The available empirical evidence shows that the sentencer plays an important role as a determinant of sentence. One way of reducing the individual sentencer as a source of disparity would be to reduce their discretion in what sentence to impose on a given type of defendant for a given offence. While the judiciary in the United States is by now well accustomed to the 'just deserts' philosophy of sentencing curtailing their discretion, sentencers in Britain,⁶² Australia and New Zealand, however, are likely to resist such a restriction on their judicial independence. Other policy implications that would seem to follow from the findings reported about the sentencer as a source of disparities are: (a) educating sentencers about this knowledge; and (b) actively involving them in realistic sentencing exercises aimed

The judiciary themselves have been shown to be a source of disparities.

at achieving uniformity of approach (Kapardis, 1985). Already such an approach has been used, among others, by the Judicial Studies Board in England and Wales and the Institute of Judicial Administration in Victoria, Australia, and, on the basis of feedback from magistrates and judges (personal communication), has proved very useful in achieving more uniformity in sentencing. A proper empirical evaluation of such attempts to reduce disparities in sentencing by targeting sentencers is long overdue.

4 MODELS OF JUDICIAL DECISION-MAKING

A variety of models⁶³ has been proposed for judicial information-processing and decision-making by both psychologists and non-psychologists but there is no one that is widely accepted. Chambliss and Seidman (1971) presented a sociological picture by identifying the effect of structural inputs (for example, court structure in appellate courts, see Coffin, 1994) and their impact on structural outcomes (that is, the court system). Two British criminologists, Hood and Sparks (1970:148–9) – suggested a more social psychological viewpoint by focusing on the court system and identifying the flow of information in the courtroom.

According to Rowland and Carp (1996, cited by Wrightsman, 1999:22), ‘The attitudinal model⁶⁴ proposes that if a challenged behavior is inconsistent with a justice’s ideological perspective, that justice will vote to reject the behavior’. Thus, trial facts are interpreted with reference to judges’ ideological viewpoints and value systems. The attitudinal model also maintains that judges also rely on personal intuition and ‘work backward’ to ensure that their decision is logically consistent (p. 48). Support for the attitudinal model was reported by Feather (1996), who found that the extent to which an offender is thought to deserve a particular penalty is related to one’s perception of offence seriousness and how responsible one perceives an offender to be for the offence in question.

The cognitive model of judicial decision-making questions the one-to-one relationship between attitudes and behaviour and makes use of schemas, in other words, ‘an organised body of knowledge from past experience that is used to interpret a new experience’ (Wrightsman, 1999:23). Thus, the cognitive model uses attitudes as ‘filters’. As Rowland and Carp (1996) have pointed out, however, the problem with the attitudinal model is that it reflects an obsolete conception of the pivotal role of attitudes.

Michon and Pakes (1995:510–11) draw attention to a distinction between ‘normative’ and ‘descriptive’ models. The latter describe optimal decision-making behaviour, while the former describe how decisions are made in real life. Descriptive models assume that a decision maker, like a magistrate or a judge, is limited as to the amount of information he/she can process and, consequently, uses information selectively (p. 511). Descriptive models focus on the heuristics (that is, the processes by which they find an answer to a question) and strategies real-life decision-makers use and aim to describe the cognitive processes underpinning such decision making.

Michon and Pakes (1995) also distinguish six steps in the decision-making process: problem recognition, decision-making problem, identification of consequences, utility and likelihood assessment, long-term vs short-term consequences and choosing between alternatives (pp. 512–13). They conclude that: (a) the complex task of judicial decision-making is performed rather well by human decision-makers, but not necessarily by using methods that would be described by normative models; and (b) judicial decision-making cannot be ‘rational’ in a pure sense, as the term is used in economics, for example (p. 523).

Attribution theory is concerned with how people attribute traits, abilities and motives to people on the basis of observing their behaviour (Heider, 1958; Kelley, 1967). A basic distinction in attribution theory (see Schneider, 1995, for an excellent account) is that between internal (that is, dispositional) and external (that is, situational) causes of behaviour. Focusing upon the sentencer as a source of variation, researchers in different countries have utilised attributional analysis (for example, Weiner 1979, 1980) in an attempt to understand how sentencers perceive a broad range of sentencing-relevant factors and how they are related to the sentence imposed (Ewart and Pennington, 1987; Oswald, 1992). According to Weiner’s model, the psychological meaning of ‘cause’ (attribution of responsibility) results from the way an individual classifies another’s behaviour in terms of locus of control, stability (that is, consistency over time) and controllability. Carroll and Payne (1977) reported that subjects imposed lenient sentences if they perceived the offender’s criminal behaviour as resulting from external, unstable and uncontrollable causes. Ewart and Pennington (1987) tested Weiner’s attributional model with British police officers and social workers and reported findings providing further support for the model. Bierhoff et al. (1989) also reported a significant relationship between causal attributions and punishment recommendation, with sentences becoming more lenient as situational (external) attribution increases (p. 204). Another German study by Oswald (1992) used questionnaires to survey 36 criminal court judges and found that the more a judge adopted the perspective of the victim, the more likely the judge was to attribute responsibility to the offender. Future research should test experimentally Oswald’s findings and attempt to synthesise Weiner’s (1979) model and Oswald’s offender-victim perspective dimension.

Drawing on affect-control theory put forward by Heise (1987), Tsoudis and Smith-Lovin (1998) and Tsoudis (2000) have expanded attribution theory to include emotion as a basic component of sentencing decision-making. More specifically, Tsoudis maintains that judges decide on sentence severity on the basis of an attributional analysis of the causation of offence as well as their assessment of the offender’s identity (for example, whether the offender has shown remorse). Thus, if a judge comes to believe that an offender regrets having committed the offence or if an offender has no previous convictions, that judge will be more sympathetic towards that offender. However, by incorporating emotion in judicial decision-making, the whole process becomes less straightforward and more difficult to predict. There is evidence that when subjects are asked to judge someone and

are feeling angry, they are more likely to ‘remember’ their stereotypes (Forgas and Fielder, 1996) but are less likely to do so if feeling sad (Bodenhausen et al., 2000). Therefore, more work is needed before judgement can be passed on the ‘affect-control attribution theory’. Some evidence in support of strong effect of emotion in sentencing has been reported by Mackenzie (2005) on the basis of her interviews with 31 judges in Queensland. As mentioned in the previous chapter, the story model (Pennington and Hastie, 1993) has been applied to jury decision-making with success. The story model can also be used to predict judicial decision-making. Wagenaar et al. (1993) used it to account for the way Dutch judges assess the prosecution evidence and decide if an accused is guilty. Finally, as Van Koppen (2002) reminds us, the real challenge for researchers working on models to predict judicial decision-making is to provide a theoretical framework within which to explain why decisions in the more ‘difficult’ cases go wrong and an innocent person is convicted.

5 VICTIMS⁶⁵

Traditionally, criminologists have focused on the offender in their search for a widely-accepted explanation of why people commit crime. In his landmark work *The Criminal and His Victim*, von Hentig (1948) criticised criminology for its exclusive focus on the offender and proposed that an interactionist approach to victim precipitation and ‘victim-proness’. In so doing he stimulated interest in studying victims by, for example, Wolfgang (1958), who examined victim precipitation in homicide in the United States, and Amir (1971), who studied victim precipitation in rape. The interest in victims has been strengthened by victim surveys at the national⁶⁶ and international level.⁶⁷ More recently, criminologists have concerned themselves with secondary victimisation and the collateral effects of crime as well as punishment, shifting the focus onto the families of primary offenders (Young, 2000), of prisoners (Travis and Waul, 2004) or of offenders sentenced to death or executed (Sharp, 2005; Vandiver, 2003). By expanding the concept of ‘victim’, victimisation researchers have rendered it problematic and some authors prefer to use the term ‘survivors’ (Lamb, 1999; Rock, 1998), while others (Hillyard et al., 2005) prefer to talk about ‘harms’.

Many people worldwide have been victims⁶⁸ of crime, whether common offences against the person and property or economic crime, trafficking, genocide, war, terrorism, torture and crimes committed by governments, while more have experienced fear of crime. Contrary to popular belief, crime rates in some western countries (for example, the United States, Finland, and England and Wales) and, consequently, the risk of becoming a victim, have been falling since the mid-1990s and may well be stabilising (Blumstein and Wallman, 2000; Tonry, 2005; Walker, Kershaw and Nicholas, 2006:1). Crime victimisation, however, remains a phenomenon of great concern to researchers, the public and politicians alike. The risk of criminal victimisation and of repeat victimisation varies as a function of country, region, and people’s socioeconomic status and lifestyles. Most at risk are

young people aged 16–24 years (Nicholas et al., 2005:71). Also, as victimisation surveys show, victims of common assault, especially domestic violence,⁶⁹ are most likely to suffer repeat victimisation, while the crime rates for car theft, burglary and violence are higher in urban than in rural areas. The reader should note that the criminal victimisation of people with disabilities has been neglected by researchers. In the United States, the impetus for work in this area has been the *Americans With Disabilities Act*, implemented in July 1992.⁷⁰

There is a widely held belief that victims of crime have more punitive attitudes towards offenders (Takakashi, 2005) but this understandable belief has been shown to be wrong by both international and national crime victimisation surveys (Bae, 1992; Newman, 1999; Umbreit, 1990) and, also, that victims' main concern is their own safety not how long their assailant will be behind bars (Hagemman, 1991). Furthermore, research⁷¹ in the United States (Higgins and Snyder, 1996), New Zealand (Galaway, 1992) and Germany (Sessar, 1990) found that the public also accepts alternative sanctions to imprisonment such as restitution for property offenders. Finally, available research evidence (Coates and Gehm 1989; Nugent and Paddock, 1995) shows that non-custodial measures, including victim–offender mediation schemes, can be more effective than imprisonment, as far as offenders' recidivism is concerned. Such evidence adds significant support to the utility of restorative justice (RJ), a relatively new approach to dealing with offenders (Council of Europe, 1999) and aids in convincing the sceptics.

Traditionally in common law jurisdictions victims' only participation in a criminal trial was as 'third parties' appearing to testify as witnesses. Since the late 1980s, however, there has been a change of attitudes towards the role of victims⁷² exemplified, for example, by the introduction of victim impact statements (introduced in Britain under the Victims' Charter 1996), victim-offender mediation programs and a gradual broadening of victims' active participation in the administration of criminal justice (see Hoyle and Zedner, 2007, for detailed discussion). The term 'victim statements' was adopted in England and Wales, instead of 'victim impact statements' to distance the new development in British criminal justice from American 'statements of opinion' (Morgan and Sanders, 1991:1), to enable victims, for example, to inform the court about the physical, psychological, social or emotional consequences of the crime on them or their family. Concern about the treatment of victims of crime by the criminal justice system is evident at the local, national and international level. Developments in *victims' legal rights* in western English-speaking common law countries include, for example, not only victim impact statements but, also, compensation for criminal victimisation. Interestingly, however, many judges in Mackenzie's (2005) study in Queensland did not feel that the existence of victim impact statements made any difference to sentence outcome (p. 125). Drawing on Bartol and Bartol (2004b), in the United States bills of rights have been enacted in all the states that provide for mandatory restitution, that is, measures aimed at restoring victims to their physical, psychological and financial position prior to their victimisation. Wisconsin passed the first bill of rights for

victims in 1980, Congress passed the *Victim and Witness Protection Act* in 1982 and the Office for Victims Crime was established in 1983. In parts of the United States there are shield laws that protect victims from being asked about their sexual history (p. 195). According to the California-based KlaasKids Foundation, in the United States in the middle of 2007, 15 states had Victims' Rights Amendments; furthermore, the proposed bipartisan Feinstein–Kyl Crime Victims' Rights Amendment to the Constitution of the United States (that has been before the House of Representatives since 1996) is meant to protect in both state and federal courts such rights of victims as being notified of public proceedings involving the crime, informed about the offender's sentence or potential release date, and entitlement to restitution. In Australia⁷³ the seven jurisdictions differ in what they provide as far as victims' rights are concerned. South Australia pioneered the idea of a commissioner for victims' rights and legislation providing a victims' charter is also to be found, for example, in Victoria⁷⁴ and New South Wales, setting out a list of principles of how the criminal justice system and victim support services should respond to victims of crime. In many parts of the United States the law provides for *victim advocacy*, that is, the victim has a right to address the court on sentence (Mackenzie, 2005:127).

In England and Wales, the *Code of Practice for Victims of Crime*, issued by the Home Secretary under s.32 of the *Domestic Violence, Crime and Victims Act 2004*, lists 11 criminal justice services,⁷⁵ which, for the first time, are required by law to provide details of the minimum standards of service they provide to victims. The Code, launched on 3 April 2006, also aims to ensure that victims are kept up to date on their case as it progresses through the criminal justice system and provide details of the special services available for vulnerable and intimidated victims. Victims' rights generally include:

- timely information about the crime at different stages in the criminal justices process
- the police caring for bereaved relatives
- information about the criminal injuries compensation scheme available
- information about and confidential support from victim support services
- a service for vulnerable or intimidated victims
- being able to complain about the service/s provided
- respect for their privacy.⁷⁶

Regarding offenders, victims have additional rights to assist their physical, emotional and financial recovery following a crime that include entitlement to file a civil suit for damages regardless of whether an offender is convicted and protection from offenders by being informed of their release from prison and any changes in the parole conditions in order to avoid any contact by the offender.

In their struggle to cope with the consequences of the victimisation experience, victims can draw on their own resources but their recovery depends both on the social support available to them and the time available for recovery. It is also

known that, given sufficient time, high socioeconomic status crime victims of good physical and mental health who enjoy a good, supportive network of friends, can cope successfully with the consequences of their victimisation (Takakashi, 2005: 24). Failure to cope could well worsen victims' helplessness, vulnerability and disappointment with the authorities (p. 25). Consequently, victims with insufficient resources to cope with the victimisation experience by themselves are more likely to expect authorities to protect and assist them in the recovery process. It needs to be emphasised in this context that: (a) punishing the offender for the crime committed does not 'even the score', as supporters of the 'just deserts' approach⁷⁷ by the courts maintain; and (b), generally speaking, the sentence imposed by the court does not repair the victim's shattered inner world – that goal is significantly more likely to be achieved 'by a process of apology-forgiveness' (Takakashi, 2005:26).

Regarding victim rights in international law, the Rome Statute of the International Criminal Court (ICC) was adopted by the UN General Assembly on 17 July 1998 and entered into force on 1 July 2002. For the first time in the history of international criminal justice, Article 68(1) of the Rome Statute of the ICC provides that the Court shall take appropriate measures to protect the safety, physical and psychological well-being, dignity and privacy of victims and witnesses. To this end, Article 68(2) provides that victims can participate in any part of the proceedings in camera or their evidence can be presented by electronic or other means. Also, in order to assist victims to rebuild their lives, often shattered by horrendous experiences, the court has established a Victims' Trust Fund that is administered by the court's registry and is also supervised by an independent board of directors of high moral character who are elected for three years by states parties. Finally, Article 43(6) provides for a victims and witnesses unit within the registry that is tasked with providing, in consultation with the Office of the Court's Prosecutor, counselling and other assistance to victims and witnesses who appear before the court and, also, plans protective measures and security arrangements for them. Let us next consider restorative justice in some detail.

6 RESTORATIVE JUSTICE

Contemporary restorative justice (RJ) programs derive from and resemble much older forms of RJ, from traditions and customs, including family group conferencing programs, introduced in New Zealand in the context of the country's reform of its juvenile justice system, incorporating traditional Maori ways of resolving disputes and dealing with criminal behaviour (Strang, 1999). Another such example is the Canadian Native Peoples' (the Inuits') notions of healing and sentencing circles; also, as far as native Americans are concerned, the Navajo Justice and Healing Ceremony (Braithwaite, 1999); and, finally, African peoples' healing circles, which have been utilised in RJ programs.

As increasingly more jurisdictions worldwide focus on victims' rights, RJ as a paradigm has been receiving increasing attention in various countries since the early

1990s. According to van Ness (2002:1), in 2002 the UN Commission on Crime Prevention and Criminal Justice as well as the Economic and Social Council of the UN adopted a resolution directing the secretary-general to consider the adoption of RJ principles. Since about 1990, domestic legislation in many countries (for example, Australia, Austria, Canada, England, New Zealand, South Africa) has made it possible to implement RJ programs.

A very crucial part of the restorative justice concept is the offender's apology. It has been known for a while that a victim's recovery from the psychological harm caused by the offence is facilitated if the offender apologises to the victim. Murphy (1988) parallels the offender's apology to the victim with ritual shaming or humiliation, a process that improves the victim's social status. The importance of the victims receiving an apology from their offenders has been documented by a number of studies, including Strang's (1999) comparison of victims in court-processed cases and victim-offender conference attendees. Strang also reported that, compared to court-processed victims, victims who attended a conference were less likely to be angry, less likely to be punitive towards their offenders and, also, more likely to feel sympathy towards them as a function of the conference experience.

Penologically speaking, with the exception, perhaps, of what Walker (1980) called 'primitive retribution', the various justifications offered by magistrates and judges in imposing sanctions on convicted offenders (for example, punishment, individual or general deterrence, rehabilitation) evolve around punishment and crime-reduction. Restorative justice is a separate and unique framework within which to deal with crime by juveniles and adults that has to be distinguished from both retribution as well as rehabilitation.

Restorative justice theory developed out of the early experience with victim-offender reconciliation programs. In his well-known article of three decades ago on 'conflicts as property', Christie (1977)⁷⁸ argued that conflict had been taken away from victims. He maintained that, on the one hand, there was no real sense in which victims could participate in their own case and, on the other, offenders had no real opportunity to confront the consequences of their behaviour and, finally, the community itself had no way to deal with offending. RJ recognises 'conflict as property' and focuses jointly on the offender, the victim and the community, and aims to create a balance between the three protagonists. What many people find appealing is that the RJ approach in criminal justice recognises the injustice, so that in some way, equity will be restored, resulting in the process participants feeling safer, more respected and more empowered (Weitenkamp, 2002). A significant difference between sentencing and RJ is that in the former the whole procedure is an arbitration process controlled by the magistrate or judge, whereas the latter is meant to be largely in the hands of lay parties (Shapland et al., 2006:510). Braithwaite (2002:166) has drawn attention to the fact that repair is a very different value to retribution in the form of hard treatment of the offender. The repair component of RJ, together with those of transformation and empowerment with others, make possible the republican dominion of citizens who, through RJ, impose limits on

the exercise of power over others – this is how Braithwaite conceives of restorative justice.

The four values/components of RJ proposed by van Ness and Strong in 1997 are encounter, amends, reintegration and inclusion. Shapland et al. (2006:512) list nine tasks of RJ: communication, apology, talking about the future, rehabilitation, reparation, healing, restoration, reintegration and transformation. Thus, restorative justice focuses ‘on losses, repairs the damage inflicted, seeks satisfied parties and views the victim as the central person of the whole process’ (Weitenkamp, 2002:323).

The website of the Home Office for England and Wales for crime and victims includes a window on RJ. Visitors are informed that

Restorative justice brings victims, offenders and communities together to decide on a response to a particular crime. It's about putting victims' needs at the centre of the criminal justice system and finding positive solutions to crime by encouraging offenders to face up to their actions.

A victim's likely reasons for requesting a restorative justice approach include: make an offender realise how the crime has affected the victim; to find out from the offender himself the answer to such questions as to why he targeted that particular victim, so as to help comes to terms with the victimisation; and, finally, to openly forgive the offender. In this context it needs to be emphasised that restorative justice is by no means a soft option; in fact, many offenders find it extremely difficult to take responsibility for their actions, to apologise, and would much rather serve another term of imprisonment.

Evaluating Restorative Justice

The main merits of restorative justice are that whereas ‘traditional justice’ is about punishing offenders for their deeds against the state, RJ emphasises the need for offenders to make amends directly to those they have harmed. Supporters of RJ do so because it: gives victims a bigger role in the criminal justice system; allows offenders to account to victims for the harm they have caused them and to provide them with more meaningful reparation; makes offenders accountable by affording them an opportunity to take responsibility for what they have done; and, finally, by resolving the conflict between the offender and the victim, RJ enhances public confidence that offenders are making amends for their criminal behaviour.

Restorative justice approaches can be used for a wide range of incidents, ranging from minor anti-social behaviour like causing criminal damage, to serious crimes like assault and robbery. Restorative justice approaches have been used to solve problems among young students, juvenile and adult offenders, domestic violence and corporate crime. Savage (2007) has applied the conceptual framework and principles of RJ to interpret justice campaigns in the UK, largely by victims, that exposed miscarriages of justice as injustices. He concluded that, in terms of

principles, such campaigns are one-sided because the 'offenders' involved in miscarriages of justice, namely, the government and government institutions, are loath to accept guilt or that they have failed. Finally, victim participation is always voluntary, and a basic precondition is that offenders need to have admitted some responsibility for the harm they have caused. Perpetrators and victims are brought into contact through: (a) *direct mediation* (that is, a face-to-face meeting between the victim, offender, facilitator and perhaps supporters for each party); *indirect mediation* (that is, a facilitator helps the victim and the offender to communicate with each other by passing on their letters to each other); and *conferencing* (that is, the victim and the offender, especially young ones, meet in the presence of each other's supporters as well as members of the wider community, who provide support for the two parties).

Regarding empirical evidence in favour of RJ, Shapland et al. (2006) reported a study that evaluated 285 restorative justice conferences in England and Wales. They found very few instances in which the conference or direct mediation broke down and no outcome was reached (p. 509), saw no assault during any of the restorative justice events (p. 513) and, finally, noted that all participants were generally keen to discuss measures to address the offender's problems (p. 517).

Considering criticisms of RJ, by definition the conferences held in the context of RJ programs are unique by virtue of the protagonists who participate and the aims of the event. Consequently, as Shapland et al. (2006) argue, one should not readily generalise across cultures characterised by different normative assumptions about justice that participants bring to the event. Also, as Shapland et al. and Daly (2004) have pointed out, the whole notion of 'healing' is problematic. Given the anomic nature of late modern urban communities in general and micro-communities in particular, characterised by weak social bonds, Johnstone (2002) has questioned the ability of restorative justice to achieve reintegration into a community. One could argue, however, that it is part of the task of RJ to identify and, if necessary, build, such micro-communities in urban centres to strengthen offenders' social bonds. Even though the evaluation study by Shapland et al. (2006) observed various signs of welcoming the offender back into society (for example, in the form of conference participants shaking hands with the offender and wishing them well), 'there was rarely a sense of welcoming the offender back into a specific community' (p. 521). Weitenkamp (2002:325-6)⁷⁹ has argued that little has been achieved by RJ, as many crimes go unreported and most offenders worldwide are still handled on the basis of a retributivist approach to criminal justice (Fattah, 1998). Not surprisingly, therefore, RJ has not gained a major role in the criminal justice system, with the exception perhaps of New Zealand and Australia. Another criticism that has been levelled against RJ is that RJ models: (a) admit only a small number of minorities and a disproportionately large number of juveniles, first-time offenders and property offenders; and (b) they have not served as alternatives to incarceration and often lead to 'wider and different nets of social control'.

In conclusion, strong advocates of RJ have hoped that it would ‘transform’ criminal justice (Shapland et al., 2006:522). However, the same authors convincingly argue on the basis of their own study of RJ conferences in England and Wales that: ‘Restorative justice situated in criminal justice is necessarily operating in the shadow of criminal justice – but that shadow may be reflected back in far more complex and more resonant ways’ (p. 524).⁸⁰

CONCLUSIONS

The issue of disparity in sentencing is one of public concern and has attracted considerable research. A major contributing factor to disparities is the wide discretion enjoyed by magistrates, judges and, in the United States, juries, as well as the existence of conflicting penal aims⁸¹ and lack of sufficient guidance on how judicial officers are to exercise their discretion. Researchers have used a range of different methods to disentangle disparities in sentencing. This chapter has focused on studies of actual sentencers and the importance of extralegal factors, which are few in number, but controversial. The available empirical evidence shows that a criminal defendant’s race and, to a lesser extent, gender impact on sentence severity, documenting discrimination by the courts of these categories of defendants. Of particular concern is the failure of the US Supreme Court to thwart, by means of guidelines, apparently widespread racial discrimination by courts against African-American defendants when imposing the death penalty in cases when such defendants offend against whites. Such discriminatory practices by the courts (also evident generally against Latino defendants) add further support to the call for the abolition of the death penalty.

Inconsistent findings have been reported about the importance of a defendant’s attractiveness. Finally, sentencers themselves have been shown to be a major source of disparity. Significant reduction of the range of sentencing options available to them, however, does not seem to be a commendable measure; educating sentencers about sources of disparity by focusing, perhaps, on how they perceive defendants and their circumstances, how they integrate different sources of information, how they attribute motives and traits to defendants who appear before them in order to select a particular sentence and training them in how to achieve uniformity of approach by also making use of realistic sentencing exercises, appear much more promising. Both legal and extralegal factors impact on sentencing and contribute to disparities. There is already ample empirical evidence that Justice herself is not as effectively blindfolded as some conservative lawyers and judges would have us believe.

Some significant developments in criminal justice of direct relevance to sentencing have been: evidence that for a number of years in countries such as the US crime rates have been dropping; the broadening of the concept of ‘victim’ and ‘victimisation’; research showing that the emphasis on retribution by the courts

does not reflect how crime victims themselves feel about offenders; the introduction of victim rights in many countries, including victim impact statements that give the victim a voice; and, finally, the introduction of victim rights also in international criminal justice as an essential part of the operation of the International Criminal Court at the Hague. However, there is a long way to go before a proper balance is achieved in criminal justice at the national as well as at the international level.

The use of restorative justice programs in criminal justice has been a much-needed and exciting development. There is no doubt that restorative justice has a particular appeal and has been shown to impact positively on both victims and offenders. However, in view of some of its limitations, it would be unrealistic to expect RJ to become the dominant approach in criminal justice in dealing with offenders in society.

REVISION QUESTIONS

- 1 What do you know about judicial discretion in sentencing?
- 2 What is meant by 'disparity' in sentencing?
- 3 What methods have been used to study sentencing variations?
- 4 Which extralegal characteristics of defendants influence the severity of their sentences?
- 5 What policy implications arise from the conclusion that the judiciary itself is a source of disparity in sentencing?
- 6 What models of judicial decision-making have been proposed?
- 7 What are some of the significant developments at the national and international level as far as victim rights are concerned?
- 8 What do you know about the use of restorative justice programs in criminal justice? How important a development do you consider it and why?

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7

THE PSYCHOLOGISTS AS EXPERT WITNESSES

CHAPTER OUTLINE

- Five rules for admitting expert evidence 232
- United States 235
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- The impact of expert testimony by psychologists 250
- Appearing as expert witnesses 252

Any development in scientific thinking and techniques shall not be kept from the court. Moreover, such developments in scientific thinking should not be kept from the court because they remain at the stage of hypothesis.

Lord Justice Cage and Justices Cresswell and Field in *R. v. Bowman*, Court of Appeal (Criminal Division), 2006, EWCA Crim. 417.

Expert witnesses do not just appear out of the blue. They are recommended by a city's 'old boy' network over lunches, telephone calls and drinks. Or they are tried out by legal firms and insurance companies and, if successful, put on to their 'panels' of suitable experts.

(Ragg, 1995)

Greater numbers of expert witnesses are being permitted to testify on a broader base of subject matter than has hitherto been permitted.

(Freckelton and Selby, 2002:12).

INTRODUCTION

The earliest description of the role of expert evidence in common law courts is to be found in the case of *Buckley v. Rice Thomas* in 1554 (Freckelton and Selby, 2005:21).¹ Experts, in the form of medical doctors, appear to have first been called upon to advise judges at the Old Bailey 600 years ago, but it was not until around 1620 that a jury was furnished with expert testimony for the first time. By 1721 there was the first challenge to an expert witness (a surgeon) testifying for the prosecution by another expert testifying on behalf of the defendant (Landsman, 1995). However, it was not until the latter part of the eighteenth century that the role of the expert witness (as the term is generally understood by lawyers on both sides of the Atlantic) was finally shaped, as counsel came to participate more and more in questioning and cross-examining expert witnesses (Landsman, 1995:139).² One of the earliest psychologists to testify in a criminal trial was J. Varendonck in Belgium in 1911 (Bartol and Bartol, 2004b:9) but it was not until 1921 that an American psychologist testified as an expert in a courtroom for the first time.³ Lawyers' and other professionals' demand for expert evidence by psychologists has increased significantly since the 1980s, reflecting growing recognition that psychologists 'have a unique contribution to make to judicial proceedings' (Gudjonsson, 1993:120). While 'The specialty most involved in forensic psychology in practice is clinical psychology' (Blackburn, 1996:14), as shown in this chapter, forensic psychologists, including legal psychologists, have become accepted as experts on both sides of the Atlantic and in the Antipodes. A survey by Gudjonsson (1996a)⁴ of 522 psychologists involved in court work for the British Psychological Society found their number had increased by 60 per cent since 1984 and less of them were cross-examined. Also, close to half (47 per cent) of the reports to the court were child-care related. However, the increasing demand of psychologists as expert witnesses means it is likely that the quality of their evidence is not what it should be. Some good news about psychologists as expert witnesses has come from Bach and Gudjonsson (2004), who used a questionnaire to survey personal-injury lawyers about how satisfied they were with expert witness reports by psychiatrists and psychologists. With a response rate of 15 per cent, they found that the majority of the respondents were satisfied with the reports and no differences were found between the expert reports of psychologists and psychiatrists. Areas that show increasing involvement of psychologists as experts are syndrome evidence, confessions by suspects, eyewitness testimony and family law. Psychologists, of course, are called as expert witnesses in both civil and criminal cases. As seen below, the range of cases has been broader in some jurisdictions than in others.

Demand for psychologists as expert witnesses has increased significantly since the 1980s.

The terrain traversed is dotted with very significant developments in the courts' treatment of expert testimony by psychologists in a broad range of areas. It is noted that in a major judgement (*Daubert v. Merrell Dow Pharmaceuticals*; see below) the US Supreme Court has reasoned its criteria for deciding whether expert evidence shall

be admissible. Without abandoning the ‘common knowledge and experience rule’ (see *R v. Turner* [1975] below), the courts in England have opened the door to the psychologist as expert witness. Careful examination of the relevant case law in Australia, New Zealand and Canada (see Freckelton and Selby, 2005, for an in-depth analysis) shows that in a number of recent cases the courts in these countries have followed a more liberal approach to the interpretation of the common knowledge rule (Freckelton and Selby, 2005:105). This chapter does not purport to deal with the controversies about the adequacy of legal procedures for selecting or qualifying experts, whether expert testimony can be prejudicial, the objectivity of expert witnesses, the ethics of expert testimony by experimental psychologists (see McCloskey et al., 1986) or the scarcity of generally acceptable scientific methods and theories (Golding, 1992).

One of the basic assumptions in common law is that there exists a distinction between facts and the inferences that can be drawn from such facts. The distinction between ‘fact’ and ‘opinion’, however, is not without difficulties (Freckelton and Selby, 2005:11). It is the function of the magistrate, judge and jury to draw inferences. The role of witnesses is to state the facts as they have been directly observed by them. In other words, witnesses do not give their opinions. However, the law makes an exception to this basic rule in the case of an expert in cases where a tribunal of fact decides that a specific issue calls for an expert witness because the particular expertise does not fall within the knowledge and experience of the magistrate, judge or jury, and a witness qualifies as an ‘expert’. In some jurisdictions (for example, the United States) an expert witness is allowed to also express an opinion on the ultimate issue, the very question which the tribunal itself has to answer. Hamlyn-Harris (1992), however, has pointed to the danger of courts coming to depend on experts’ opinion on an ultimate issue before deciding the issue (p. 82).

The question of whether a witness is an expert is a question of fact for the judge. A particular and special knowledge of a subject that has been acquired through scientific study or experience can qualify a witness as an expert (Cattermole, 1984:126). To illustrate, in *Moore v. Medley* (*The Times*, 3 February 1995) a member of the Inner Circle of Magic was allowed to testify as a highly expert magician that there were various ways ‘one could have a fraudulent manipulation of coins’ (Smith, 1995:113). Australian federal, New South Wales and Tasmanian statutory law⁵ provide that: ‘if a person has specialised knowledge based on the person’s training, study or experience, the opinion rule⁶ does not apply to evidence of an opinion that is wholly or substantially based on that knowledge’ (Freckelton and Selby, 2005:57). The well-known British forensic psychologist Haward (1981a) identified four roles for forensic psychologists (using the term ‘forensic’ in a broad sense) who appeared as expert witnesses:⁷

- 1 *Experimental*: this could involve a psychologist informing the court: (a) about the state of knowledge relevant to some cognitive process; and/or (b) carrying

out an experiment (for example, involving eyewitness testimony, or a defendant's claim to be suffering from a phobia) directly relevant to the individual's case before the court (Gudjonsson and Sartory, 1983).

- 2 *Clinical*: as already mentioned, this is the more common role for psychologists appearing in western English-speaking common law countries and involves testifying, for example, on their assessment of a client's personality, IQ, neuropsychological functioning, mental state or behaviour (Freckelton, 1990; Gudjonsson, 1985,1995b:62).⁸
- 3 *Actuarial*: in a civil case involving, for example, a plaintiff claiming for damages for a psychological deficit caused by someone's negligence, a psychologist may be asked to estimate the probability that such an individual could live on their own and/or be gainfully employed (Haward, 1981a).
- 4 *Advisory*: in this role, a psychologist could be advising counsel before and/or during a trial about what questions to ask the other side's witnesses, including their expert witness/es. Knowing that there is another psychologist in court evaluating one's testimony has been reported to increase an expert's level of stress when testifying in court (Gudjonsson, 1985).

Allen and Miller (1995) argued that the more fact-finders defer to experts, the greater the likelihood of irrational verdicts and of expert witnesses becoming advocates. They proposed an education-centred view of the expert's proper role at trial, very much along the lines of the *amicus* brief in *Michaels* (see chapter 4). Krauss and Sales (2001) used 208 psychology undergraduates as subjects and a Texas death penalty case involving the issue of dangerousness to investigate whether mock jurors are more influenced by clinical opinion expert testimony or actuarial expert testimony. They found that mock jurors weigh clinical expert opinion more heavily than actuarial expert testimony. However, in considering the implications for the courts of this finding, the reader should note the possibility that, as Krauss and Sales themselves admit: 'Actual jurors may have reacted differently to the experimental conditions' (p. 304).

1 FIVE RULES FOR ADMITTING EXPERT EVIDENCE⁹

According to Freckelton and Selby (2005:11), five rules have evolved that specifically apply to the reception of expert evidence.

- 1 *Expertise rule*: Does the witness have sufficient knowledge and experience to qualify as an expert who can assist the court?⁴
- 2 *Area of expertise rule*: Is the claimed knowledge and expertise sufficiently recognised as credible by others capable of evaluating its theoretical and experiential foundations?

- 3 *Basis rule*: To what extent can an expert's opinion be based upon matters not directly within the expert's own observations? Such reliance on material that cannot be directly evaluated by the court falls foul of a fundamental principle of evidence.
- 4 *Common knowledge rule*: Is the information sought from the expert really something upon which the tribunal needs the help of any third party or can the tribunal rely upon its general knowledge and commonsense?
- 5 *Ultimate issue rule*: Is the expert's contribution going to have the effect of supplanting the function of the tribunal to decide the issue before the court? If so, it is likely to be rejected.

Where parties to a dispute in a criminal or civil trial call their own expert witnesses, a 'battle' of experts can eventuate (Turnstall et al., 1982). A survey of 42 experts (48 per cent were physicians), seventy lawyers employing them, 13 judges hearing cases involving them and 118 jurors who decided 40 civil cases over a 14-week period in 1988 in Dallas County, Texas, by Champagne et al. (1991) reported that expert 'battles' occurred less frequently than had been suggested. Of course, it is not certain whether the findings reported still apply. The main limitations of such a postal survey, as Champagne et al. themselves acknowledge, is not knowing whether non-respondents (63 per cent) differ from respondents (37 per cent).

Psychologists in the United States have been appearing as experts more frequently and in a larger range of cases than their counterparts in other western English-speaking common law countries.¹⁰ Kassin et al. (1989) surveyed 63 leading eyewitness testimony researchers in the United States and found that over half of them (54 per cent) had testified on the subject at least once, with an average of 7.6 occasions. Kassin et al. also found that more had refused to testify at least once. Reasons for refusing to testify included feeling that one did not have anything useful to say, having doubts about their expertise in a given case and being concerned about not being allowed to qualify their answers. Kassin et al. also reported that experts were equally likely to testify for the prosecution as for the defence, and for both sides in a civil case. The same survey shows that although 'hired guns' exist in forensic psychology as they do in other fields, there is no justification for assuming that this is a common feature of such eyewitness experts. Regarding the 'hired gun' effect idea, a mock-juror study by Cooper and Neuhaus (2000) used 140 jury-eligible residents in New Jersey aged 18 to 72 years as subjects, and the legal case used involved the scientific issue of whether a chemical to which the plaintiff had been exposed was the immediate cause of his cancer. It was found that: (a) the experts who are highly paid for their testimony and testify frequently are perceived as 'hired guns'; and (b) they are neither liked nor believed, especially if the expert testimony adduced is complex and cannot be easily processed.

Five rules have evolved in western common law countries which specifically apply to the reception of expert evidence.

'Hired guns' are not believed by mock jurors.

There are differences between legal proceedings in different countries and this includes the precise roles of expertise and of expert witnesses (Nijboer, 1995:556). To illustrate, in western common law countries an expert witness testifies for the side that has retained him/her and pays his/her fees. In contrast to this practice, in continental European jurisdictions expert witnesses are normally appointed by the court to assist the court. In addition, there is a difference in status between court-appointed and privately-retained expert witnesses, with the former enjoying a higher status (p. 557).¹¹ Another important difference between continental European jurisdictions and England and Wales, for example, which Nijboer points out is the fact that the former (for example, France, Switzerland, Holland, Belgium) are characterised by 'very low thresholds for the admissibility of expert evidence. They prefer to regulate how the expert evidence, which is admitted, is regulated' (p. 559). Expert witnesses, of course, may be involved in different stages of legal proceedings: pre-trial, trial and post-trial. This chapter is concerned with psychologists as expert witnesses in court-based legal disputes.¹² Drawing on Freckelton and Selby (2005), courts in some countries are increasingly appointing specialists called 'referees' to report to the court on a specific issue. An interesting recent development in this context is the use of retired judges when parties want their dispute settled as quickly as possible (p. 708). In addition, 'assessors' have been used in some jurisdictions to ascertain customary laws and habits, for example. 'Assessors' are persons with expertise in a particular area by virtue of their special skill, knowledge or experience who 'sit with a judge during court proceedings to answer questions posed by the judge' in their area of expertise (p. 698).

Irrespective of whether an expert witness has been instructed by the prosecution or the defence, the duties of an expert witness in a criminal trial were set out in *R v. Harris* and other appeals [2005] All ER (D) 298 (Jul) and reiterated in *R v. Bowman* [2006] EWCA Crim. 417 a year later (in order to assist in building up a culture of good practice), are owed to the court and override any obligation the expert may have to the side that is instructing or will be paying him and are as follows: (1) the evidence proffered should be, and be seen to be, the independent product of the expert, devoid of any influence by the exigencies of litigation; (2) to assist the court by providing independent (that is, objective unbiased) opinion within his expertise; (3) should state the facts or assumptions on which his opinion is based, including material facts that might detract from his opinion; (4) he should clearly acknowledge when a particular issue or question does not lie within his expertise; (5) if his opinion is based on insufficient data, he must make it clear that his opinion is only provisional; and, finally, (6) he must communicate immediately to the other side and, if appropriate, to the court, any change of opinion on material matters following exchange of reports. The court stressed that an expert should at all times be objective and impartial. Finally, the court outlines what should be included in an expert witness' report, in addition to the specific factors

mentioned in *The Ikarian Reefer* [1993] 2 Lloyds Rep. 68. *R v. Kai-Whitewind* [2005] All ER (D) 14 (May) and *R v. Harris*. Interestingly, the expert's report should contain details of the methodology and so forth used to do the research, etc., whether it was under the expert's supervision and, also, relevant extracts of literature or any other material that may assist the court as well as a statement by the expert that in compiling his report he has done so in accordance with the duties stated above.

Importing non-legal knowledge into both criminal and civil trials has proven problematical in western common law countries with their adversary legal systems (Saks, 1992:185). There is no doubt that magistrates (be they stipendiary or justices of the peace), judges and jurors sometimes require assistance to establish the facts of a case before them. In this context, the expert witness can play a crucial role. In the words of Ian Freckelton, a well-known Australian practising lawyer and authority on expert testimony, 'The role of experts is vital. They supply information that can't be supplied elsewhere. They supply counter-intuitive information, myth-dispelling information, which may be essential to clear thinking' (quoted in Ragg, 1995:16). Alas, however, fact-finders have to also contend with the knowledge that expert 'evidence can be complex and hard for a jury to understand. Also, there's the danger of bias. These are hard financial times, and the forensic expert needs to be a repeat player. If they don't supply the information required, they will find they don't have as much work as they need to survive' (p. 16). Enough concern within the organised profession about the nature and the quality of expert testimony has resulted in forensic psychologists in the United States, for example, being provided with formal guidelines.¹³ According to Gudjonsson (1993), 'The main theme of these guidelines is that forensic psychologists have the responsibility of providing a service which is of the highest professional standard' (p. 120). Deviating from the present author's approach in the rest of the book, expert testimony is not dealt with here by structuring the discussion thematically but on a country-by-country basis. This is done for the benefit of the reader because there are significant differences in the common law position in different countries and in the fields in which psychologists are admitted as expert witnesses.

The gist of the United States Supreme Court in *Daubert* is that expert evidence needs to be scientific to be admissible in court.

2 UNITED STATES

The practice of providing expert testimony for a fee and as a means of earning a living did not become widespread in the United States until the middle of the nineteenth century, and the test for admitting expert testimony between 1850 and 1920 was 'whether the proffered expert was appropriately "qualified" to render an opinion on the issue before the court' (Landsman, 1995:150). In the landmark decision in the case of *Frye v. United States* (293 F 1013 [1923]) the District of Columbia Court of Appeals rejected: (a) testimony by a lie-detector expert¹⁴ that

the defendant was telling the truth when he denied having committed the alleged offence on the ground that the scientific theory on which it was based was not generally accepted within the relevant professional community; and (b) a request by the defence attorney that the lie-detector expert conduct his test in the jury's presence. The decision in *Frye* made 'general acceptance in the particular [scientific] field' (at p. 1014) the standard criterion for admitting expert testimony into courts. Interestingly, it was not until the early 1980s that the *Frye* test came to be cited frequently in court decisions in the United States (Landsman, 1995). *Frye* was a vague ruling that was instrumental in American courts admitting expert testimony in a rather broad range of fields without much scrutiny (p. 155). According to Freckelton and Selby (2005), while supporters of *Frye* have maintained its conservatism is its strength, critics have pointed to its lack of clarity and undue rigidity (p. 77) and that 'It is contradictory to the underlying theme of the *Federal Rules of Evidence 1975* (US), which is to admit all reliable evidence unless it is unduly misleading, confusing or time wasting' (p. 79).¹⁵ The Federal Rules of Evidence (FRE) were adopted by Congress in 1975 and included a modified standard for admitting expert testimony, namely, that the scientific evidence proffered be relevant and reliable. The FRE and *Frye* standards continued to be applied by courts in the United States until 1993 when a landmark unanimous decision was handed down by the US Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals* (113 S.Ct. 2786 [1993]). The case concerned a decision by the United States' Court of Appeals for the Ninth Circuit which had applied the *Frye* test to exclude evidence by an expert on behalf of two minor children and their parents that the children's serious birth defects were caused by their mother's ingestion of Bendectin, a prescription anti-nausea drug manufactured by Merrell Dow Pharmaceuticals. The Supreme Court held that the *Frye* 'general acceptability' standard was too austere and should no longer be the criterion in federal trials and that it had not been incorporated as part of federal evidence law but had in fact been rejected when the expert testimony rules of the Federal Rules of Evidence were proclaimed in 1975 (p. 155). In other words, the court ruled that the *Frye* standard should be replaced by the FRE standard. According to the ruling in *Daubert*, the test for expert witnesses is 'vigorous cross-examination, presentation of contrary evidence, and careful instruction' (113 S.Ct. 2786, 2798, 1993).¹⁶ More specifically, the *Daubert* judgement stated, *inter alia*, that, 'The subject of an expert's testimony must be "scientific . . . knowledge" . . . in order to qualify as "scientific knowledge", an inference or assertion must be derived by the scientific method' (p. 2795), and, 'The criterion of the scientific status of a theory is its falsifiability, or refutability, or testability . . . Another pertinent consideration is whether the theory or technique has been subjected to peer review and publication' (pp. 2796–7). A majority of the Supreme Court justices also stated that three criteria are important in deciding the issue of expert witness admissibility: (a) *relevancy* (that is, the scientific evidence must bear on the specific case before the court); (b) *legal sufficiency* (that is, the expert evidence will not confuse or mislead or prejudice the jury but will provide evidence or proof to the issues

in question, known as ‘probative value’); and, finally, (c) reliability to be decided on the basis of four standards, namely: (i) has the technique or theory been tested; (ii) the error rate involved; (iii) has the technique or theory been through peer review and been published; and (iv) the general acceptance the technique or theory enjoys in the scientific community concerned.

By handing down the *Daubert* ruling the US Supreme Court has indicated its confidence in judges adequately deciding the scientific status of a theory or technique in a civil or criminal case without scientific training; in fact, both advocates and the judiciary will need to be rather sophisticated in scientific matters (Freckelton, 1993:111). To achieve this, it will be necessary for lawyers to possess ‘cross-disciplinary knowledge and understanding’ (p. 113). The urgent need for legal psychology courses for practising lawyers provides psychologists with a great opportunity to communicate their expertise to the legal profession and move closer to bridging any remaining gap between the two disciplines.

As would be expected, ‘a large body of scholarship continues to debate the merits of the *Daubert* criteria as judicial decision-making guidelines’ (Gatowski et al. (2001:434).

In the main, such discussion has concentrated on analysing published opinions by state appellate courts and the Supreme Court.¹⁷ Such analysis is limited, however, because it deals only with published case law and *ipso facto* justifications. This is not to deny, of course, that such analysis provides insights into the impact of *Daubert*.

The next significant Supreme Court decision was handed down in *General Electric Co. v. Joiner*, 522 US 136, 118 S.Ct. 512 (1997). The issue in that case was whether Joiner’s exposure over 16 years to electrical transformer chemicals at work (The Water and Light Department of Thomasville in Georgia) contributed to his lung cancer even though he was a smoker. The trial judge excluded the testimony provided by Joiner’s expert witnesses on the grounds that: it ‘did not rise above “subjective belief or unsupported speculation”’ (at 516); in other words, the expert witness in *Joiner* did not show the scientific link between his lung cancer and the exposure to chemicals. The appellate court reversed the trial judge’s decision but the Supreme Court reversed it again, reinstating the trial judge’s exclusion, stating that the legal standard for allowing expert testimony to be put to the jury is the same as that which the relevant professional community uses (Gutheil and Stein, 2000: 244).

The question of whether the *Daubert* guidelines apply to all forms of technical or otherwise specialised knowledge, or just to scientific knowledge, was addressed by the US Supreme Court in *Kumho Tire Co. v. Patrick Carmichael*, 526 US, 13, 152, 119 S.Ct. 1167, 1176 (1999). *Kumho* concerned the expert testimony of an engineer testifying that a defective car tyre caused a car accident. The essence of the court’s decision is that: (a) the factors that a court ought to use to decide whether a scientific theory is reliable, as enunciated in *Daubert*, may apply to testimony of engineers and other experts who are not scientists; (b) the ‘gatekeeping’ obligation

of the trial judge under Federal Rule of Evidence 702 (FRE 702) applies to all expert testimony because FRE 702 does not distinguish between 'scientific', 'technical' or 'other specialized knowledge'; (c) the distinction between scientific and non-scientific evidence is unclear; and, finally, (d) the judge has broad discretion as to how to discharge his/her gatekeeping role. In other words, *Kumho* clarified that the *Daubert* analysis applies not only to scientific knowledge but also to scientific, technical and otherwise specialised knowledge. Freckelton and Selby (2002) are of the view that: 'This makes it likely that the Supreme Court will apply the *Daubert* analysis also to areas of specialised knowledge such as medicine and even psychology. This may have highly significant repercussions' (p. 79). The reader should note in this context that although the trilogy of *Daubert*, *Joiner* and *Kumho* is the basis for federal courts in the United States deciding whether to admit expert testimony, according to Kassir et al. (2001) a large number of State courts continue to use the *Frye* standard of 'general acceptance'. What, then, has been the impact of the three cases on judges and attorneys in the United States?

Analysing the content of published opinions concerned with expert evidence issues, which, as has already been argued above, has its limitations, a number of researchers (for example, Dixon and Gill, 2001; Grosscup et al., 2000) have examined how many times certain key words are mentioned or how many words are used to address a certain issue. It has been reported that judges in the United States have been more active in scrutinising expert evidence but continue to rely more heavily on the general acceptance test in *Frye* than on the *Daubert* criteria when they decide admissibility of expert testimony. Krafska et al.'s (2002) three questionnaire surveys (one each of federal judges in 1991 and 1998 and another of attorneys in 1999) found that practices and beliefs changed regarding expert testimony in the aftermath of *Daubert* in 1993; more specifically, the clarification of the admissibility criteria has encouraged both judges and attorneys to scrutinise proffered testimony more actively; one-third of judges admit expert evidence less frequently than pre-*Daubert*; there has been a reduction in the number of trials in which all of the proffered expert testimony has been allowed; judges now hold more pre-trial *Daubert*-like hearings than in the past; attorneys themselves scrutinise more the qualifications of the experts they hire as well as file more motions to have the expert of the other side excluded, and, finally, attorneys are more involved in preparing their expert's testimony. Krafska et al. also found that the *Daubert* and post-*Daubert* decisions have not affected the problems faced by judges (for example, partisan experts) and attorneys (for example, excessive fees charged by experts). Finally, Krafska et al.'s research suggests that judges limit or exclude expert testimony for the same reasons as in the past, namely for being irrelevant, the expert witness is not qualified or because the testimony will not assist the trier of fact (p. 17). The findings of Krafska et al., however, should be treated with caution because of the unrepresentativeness of their self-selected sample of judges. A great deal more research needs to be carried out to ascertain in a comprehensive way

what the real impact of *Daubert* and post-*Daubert* decisions has been on expert testimony in the United States.

According to Foxhall (2000:38),¹⁸ Justice Breyer, who wrote the concurring opinion in *Joiner* and the majority decision in *Kumho*, called on psychologists to assist the judiciary to “separate the sheep from the goats” in identifying valid psychological testimony for use by the courts’. As Gutheil and Stein (2000:248) have argued, now is the time for psychologists and psychiatrists to accept the ‘offer of cooperative effort’ (*Joiner*, at 1176) by creating a joint committee of judges and forensic clinicians to implement the recommendations in *Joiner* and *Kumho Tire* by establishing a pilot project in the courts. As far as it has been possible to ascertain, their advice has gone unheeded in the United States and elsewhere. Concluding on the significance of *Kumho*, Gatowski et al. (2001) reminded their readers that, ‘although on its surface *Kumho* resolved one of the central debates of *Daubert* and its application to different forms of knowledge, the decision failed to address the underlying assumption that judges are fully capable of making judgements about scientific reliability and validity of proffered scientific evidence. In fact, because bench philosophies of science – judicial definitions of what constitutes science – seem to reflect the rhetoric but not the substance of *Daubert*, *Kumho* may ultimately have clouded the process even further’ (p. 454).

The trilogy of *Daubert*, *Kumho* and *Joiner* assume that American judges are capable of making judgements about the scientific reliability and validity of proffered scientific evidence. However, Gatowski et al.’s (2001) empirical evidence to the contrary is undoubtedly a cause for concern and defeats the purpose of the joint effort by forensic clinicians and judges advocated by Gutheil and Stein (2000) in the light of *Joiner* and *Kumho*.

Crucial concepts in the *Daubert* judgement (for example, ‘falsifiability’ and ‘error rate’) are not understood by the majority of American judges. This is a cause for concern.

Gatowski et al. (2001) surveyed a proportionate stratified random sample of State court judges and found that:

- there was very strong support among judges in the United States for their ‘gate-keeping role’ as defined in *Daubert*, irrespective of the admissibility standard followed in their state
- many of the judges surveyed did not possess the scientific literacy apparently required by *Daubert* in order to perform the ‘gatekeeping’ role
- only 5 per cent knew the meaning of the term ‘falsifiability’ and only 4 per cent knew the meaning of ‘error rate’
- there was little consensus about the relative importance of the *Daubert* guidelines and judges emphasised they required more general acceptance as an admissibility criterion
- most did not apply judicial guidelines in differentiating between ‘scientific’ and ‘non-scientific’ expert evidence

- the judges' own 'bench philosophy' appeared 'to reflect the rhetoric rather than the substance of *Daubert*'.

Gatowski et al.'s findings seriously: (a) challenge the assumption in *Daubert*, *Kumho* and *Joiner* that judges in the United States are capable of making judgments about the scientific reliability and validity of proffered scientific evidence; and (b) indicates to the American judiciary that they should, perhaps, make good the deficit identified by means of some kind of education program aimed at improving their knowledge of the pertinent concepts and issues in philosophy of science.

3 ENGLAND AND WALES

Experts began to testify in English courts in the second half of the nineteenth century (see Hand, 1901). Interestingly, 'The general English approach to the admissibility of novel scientific or psychological evidence has been benevolent acquiescence rather than the application of any stringency in assessing the reliability or standing of techniques or theories within a particular professional community' (Freckelton and Selby, 2005:89). Until recently, British courts have been rather unenthusiastic about expert evidence by psychologists (Sheldon and McCleod, 1991:818). The landmark decision in a provocation case, *R v. Turner* (1975) Q.B. 834, has meant that, unlike their American counterparts, their expert testimony has had to surmount a rather difficult impediment to admissibility, namely, the 'common knowledge and experience' rule of evidence. This common law principle can be traced to the case of *Folkes v. Chadd* in 1782 in which Lord Mansfield ruled that an expert's opinion is admissible if it provides the court with information that is likely to lie outside the common knowledge and experience of the jury. Similarly, Lawton LJ stated in *Turner* that, 'If on the proven facts a judge or jury can form their own conclusions without help, then opinion of an expert is unnecessary. In such a case if it is given dressed up in scientific jargon it may make judgement more difficult. The fact that an expert witness had impressive qualifications by that fact alone [does not] make his opinion on matters of humane nature any more helpful than the jurors themselves; but there is a danger that they may think it does' (at 841).

The gist of the *Turner* decision is that, until recently, a court in England and Wales has adhered to the view that it does not need a psychologist's or psychiatrist's expert knowledge when it comes to psychological processes except where mental abnormality is involved. As Colman and Mackay (1993) have argued, however: 'The *Turner* rule appears to be based on an interpretation of the relation between psychology and common sense that is sufficiently wrong-headed to be called a fallacy' (p. 47). One of the underlying assumptions in *Turner* is that normal human behaviour is essentially transparent and, consequently, a jury does not need a psychologist's opinion on such behaviour since it is within their 'common knowledge and experience'. However, despite the fact that the ruling in *Turner* has largely

restricted the admissibility of expert testimony, it also recognises the need for change (Thornton, 1995:147). Colman and Mackay (1993:48–9) argue convincingly that the ‘human behaviour is transparent’ assumption is undoubtedly false, citing psychological knowledge in the areas of the ‘fundamental attribution error’ (see Miller et al., 1990), obedience to authority (Milgram, 1974), group polarisation (Isenberg, 1986), cognitive dissonance (Wickland and Brehm, 1976) and bystander intervention (Latane and Naida, 1981). Colman and Mackay conclude their critique of *Turner* by stating that ‘expert psychological evidence should be admitted whenever it is both relevant and potentially helpful to the jury in explaining aspects of human behaviour that are not easily understood with common sense alone’ (p. 49).

Examination of English authorities since *Turner* shows that psychiatric or psychological evidence which is not abnormal or does not directly concern the defendant’s state of mind or the issue of intent, has generally been excluded. However, there have been a number of encouraging decisions indicating greater readiness to admit psychological evidence (Thornton, 1995:144, 146). As far as a developing area of expertise is concerned, according to Freckelton and Selby (2005:90), the most significant analysis by a court in England and Wales for the criteria for the reception of such expertise is to be found in the Court of Appeal decision in *R v. Robb* (1991) 93 Cr.App.R. 161. The issue in that case was the admissibility of voice identification evidence identifying the voice on certain incriminating evidence of the defendant. A phonetician (who had not published his research results) was allowed on appeal to testify on the grounds that ‘voice identification is an expert field’, as Bingham LJ stated (at 165). The restrictive interpretation of the rule in *Turner* was relaxed by the Court of Appeal in the case of *R v. Sally Loraine Emery* (and another) (1993). In the *Emery* case, an 11-month-old child died as a result of serious injuries inflicted over a period of weeks of very severe physical abuse. *Emery*, the unmarried mother of the child, was found guilty in the Peterborough Crown Court in January 1992 of failing to protect the child from her father and was acquitted of occasioning actual bodily harm on her child. She appealed against her sentence of four years’ detention in a young offender institution and had it reduced to 30 months. The prosecution appealed against the trial judge’s admitting expert evidence on post-traumatic stress disorder (PTSD), ‘learned helplessness’ and ‘the battered woman syndrome’ on the grounds that the evidence concerned fell within the common knowledge rule enunciated in *Turner*. However, the Court of Appeal upheld both the trial judge’s decision to admit the expert evidence on behalf of the defendant as well as the justification offered for that decision. The reader should note in this context that defence lawyers most often enlist the services of an expert to testify but in the battered woman syndrome an effort is made to strengthen the argument that their client was acting in self-defence.

The effect of *Emery* is that courts in England and Wales are no longer to assume that expert psychiatric evidence is called for to assist the jury only when it deals with

Courts in England have opened the door to forensic psychologists appearing as expert witnesses.

mental disorder, mental handicap or automatism (Colman and Mackay, 1995). In delivering the Appeal Court's decision, Lord Taylor, Lord Chief Justice, upheld the decision of the trial judge to allow expert evidence by a psychologist and a psychiatrist that the defendant had been suffering from PTSD, 'learned helplessness' and the 'battered woman syndrome', on the grounds that such evidence was complex and was not known by the general public and was necessary to assist the jury to determine the facts of the case. According to Colman and Mackay (1995), 'The effect of the *Emery* judgement therefore appears to open the door to psychological evidence in a far wider range than has hitherto been the case' (p. 264). In *Frost v. Chief Constable of the South Yorkshire Police* ([1997] 1 All ER 540) police officers sued for damages for psychiatric injury, claiming negligence on the part of the chief constable and senior police officers in crowd control arising out of the circumstances of the Hillsborough Stadium collapse as a result of which ninety-six spectators were crushed to death and approximately 730 injured. It was claimed that the psychiatric injury sustained because they had tended to victims of the chief constable's negligence was responsible for their suffering from PTSD. The judgement in *Frost* showed a preparedness to extend the categories of compensability to include those in rescue efforts. However, 'the relaxed attitude of the court in equating back injury claims with PTSD claims suggests an emerging confidence in England at least that PTSD actions can be adequately evaluated in the forensic environment provided that the expert evidence placed before the tribunal of fact is of high quality and, presumably, well-tested by cross-examination' (Freckelton and Selby, 2005:492). When counsel sought to adduce expert evidence about the truthfulness of children in *G v. DPP* ([1997] 2 All ER 755 at 759) the English High Court decided against its admissibility out of a concern that the role of the court would be taken over by the expert witness. More recently, in *R v. Bowman* [2006] EWCA Crim. 417, the Court of Appeal, in addition to reiterating a list of duties owed to the court by an expert witness in a criminal trial as set out primarily¹⁹ in *R. v. Harris* and other appeals [2005] All ER (D) 298 (Jul), it adopted a less restrictive approach to the whole issue of expert testimony admissibility criteria than the US Supreme Court did in *Daubert* and post-*Daubert* decisions. The Court of Appeal emphasised the importance of a court having the benefit of developments in scientific thinking and techniques, even if such knowledge and techniques are still at the stage of hypothesis.

It can be seen that in a number of cases in recent years courts in England have opened the door to a broader range of cases than would have been possible under the restrictive interpretation of the rule in *Turner*. The common knowledge rule itself, of course, has not been abandoned but has been interpreted more broadly than in *Turner*. Other examples where the *Turner* rule was relaxed and courts have shown a readiness to admit expert evidence are in relation to psychological profiling evidence (see *Gilfoyle* [2001] 2 Cr.App.R. 57) and the vulnerability of suspects during police questioning, the Patrick Kane case described below shows

the importance of expert evidence about a defendant's psychological vulnerability to confess to a crime due to his being unduly suggestible (see Gudjonsson, 1996b, for details of the testimony).

CASE STUDY

The case of Patrick Kane in Northern Ireland

In March 1988 two British army corporals strayed into an IRA funeral in Andersonstown in west Belfast and were murdered. Patrick Kane, Michael Timmons and Sean Kelly were sentenced on 20 March 1990, by a Diplock Court (that is, one without a jury) to two life sentences each for aiding and abetting the murder of the two corporals. A BBC television program 'Rough Justice' alleged that Patrick Kane was the victim of a miscarriage of justice and, subsequently, the then Secretary for Northern Ireland Lord Mayhew referred the case to the Court of Appeal. Forensic psychologist Professor Gisli Gudjonsson of the Institute of Psychiatry in London and an authority on disputed confessions testified at the appeal about the psychological vulnerability of Patrick Kane. Kane was 29 years old at the time, had an IQ of an eleven-year old, suffered from a serious learning disability, was unable to read and could only write his name. He was detained and questioned by the police without a lawyer or other appropriate adult present, as required by legislation in the UK. Professor Gudjonsson opined that Kane's confession to the murder in voluntary statements he made to the police while in custody was not reliable. The Court of Appeal quashed Kane's conviction and freed him in June 1997 because new evidence in the form of expert testimony showed that his confessions might have been inadmissible and unreliable. The significance of the court's decision is that expert evidence was admitted that pertained to the psychological vulnerability to confess to a crime, a good indication of the preparedness of British courts to relax further the *Turner* rule.

Further evidence that courts in England and Wales are readier to admit expert evidence by psychologists on matters that do not fall within abnormal behaviour is also evidenced by the fact that in a small number of cases well-known legal psychologists have now testified on eyewitness testimony issues. One such British expert is Professor Ray Bull of Leicester University who, since the mid 1990s, has provided expert testimony in a number of cases (personal communication). One case concerned the possibility of 'unconscious transference' (see chapter 9) by an eyewitness in an armed robbery trial. A newsagent proprietor had his back to the

door near closing time when someone grabbed him from behind and demanded money, threatening him by sticking a knife to his face. The shop-owner saw the offender from behind as he was running away from the scene of the crime. One year earlier, the same shop-owner had been robbed in the street by someone with a knife. That offender was identified, tried, convicted and sentenced to a term of imprisonment. The issue on which Professor Bull was asked to provide expert testimony was whether the eyewitness might have assumed the identity of the second robber, influenced by what he had seen of the first robber; in other words, might the second robber's identification have been the result of 'unconscious transference'? There was a hung jury and a re-trial with a different jury. The expert testimony provided was held helpful.

The second of Professor Bull's cases involved a rape trial in which the major source of evidence against the defendant was the female victim and the fact that she had picked out his voice in a voice parade conducted by the police.²⁰ The expert was requested to express an opinion on the fairness of the parade for the benefit of the jury. The police carried out the voice parade after taking the trouble to seek the advice of a Cambridge University linguist to ensure that the suspect's voice did not differ from the rest of the voice parade in terms of accent. The voice parade constructed by the police contained segments of monologues by a number of speakers; and the suspect's voice was the only one taken from an interview with the police. An experiment was carried out by Professor Bull in which subjects were asked to identify which of the voice samples came from a police interview. Subjects identified the suspect's voice at better than chance level. The testimony was admitted by the trial judge. That case also ended up with a hung jury and, at the time of writing, there was to be a re-trial.

In another interesting case Professor Bull was asked by the defence to write a report overviewing published research on 'unconscious transference' and 'transracial identification'. It was in relation to a case in which a girl was alleged to have been indecently assaulted while walking home from school. After the incident, she reported that she believed that the teenage boy who had assaulted her was a pupil at her school but she did not know him or his name. A day or so later at school she saw the boy whom she believed had assaulted her and pointed him out to her friend. The lawyer for the accused boy was aware that not only psychological research (see chapters 2, 3 and 4) but also prior miscarriages of justice had revealed that honest eyewitnesses can make grave errors when identifying someone as the perpetrator. When the trial commenced the prosecution did not object to any of the points made in Professor Bull's report. After hearing the prosecution's case and reading the expert report the judge said that he did not need to hear the defence case as she had decided the boy should be acquitted.

The next case of expert testimony involved Professor Graham Davies, a well-known forensic psychologist at Leicester University in England and a magistrate. It helps to draw attention to a number of important points about expert testimony.²¹

CASE STUDY

R v. Steven Davis

This rather interesting armed robbery case from Herefordshire in England illustrates:

- how identification evidence can still form the principal plank of a prosecution for a serious offence in England and Wales
- the importance of judges adhering to the *Turnbull* Guidelines (*R v. Turnbull and others* (1977) QB 224 at 228, 63 Cr.App.R. 132 at 137–40)
- how expert testimony on identification can be used in criminal cases and the lengths to which the courts will go to exclude it from the witness box!

In May 1991 two men enter a specialist jeweller's shop in rural Herefordshire. Both are wearing anoraks and closely fitting caps with dark glasses. The lead man produces a sawn-off shotgun, threatens the shopkeeper and his wife and the two men make off with gems and cash, which they take from the safe. The jeweller is struck by their apparent familiarity with the location and operation of the safe. He recalls an incident in March when a stranger came into his shop during Cheltenham Race Week and enquired about the cost of making a diamond brooch. The shopkeeper agreed to provide the stranger with an estimate. When asked his name he says 'It's Steve Davis – just like the snooker player'. The shopkeeper tells the police he thinks the lead robber and the stranger are the same person.

Police records reveal that a Steve Davis with previous convictions for armed robbery lives in East London, some five miles from where the robbers' car is recovered. The police decide that Davis may have inadvertently given his real name to the jeweller, and stage an identification parade later the same month for the jeweller, his wife and two workmen who saw the robbers leave the shop. All the members of the parade are dressed in the manner of the robbers. Only the jeweller picks out Mr Davis; one of the workmen declares that the men he saw were 'definitely not there'. On the basis of the one positive identification, Davis is put on trial in Hereford in November 1991. The judge in his summing up has to be prompted by defence counsel to remind the jury of the dangers of convicting on identification alone and does not apply the *Turnbull* Guidelines appropriately. After six hours' deliberation, the jury find Davis guilty and he is given a 12-year sentence.

Davis goes to prison, but continues to maintain his innocence. Professor Davies is asked by Davis' solicitors to prepare a brief on the identification evidence. He points to: (a) the limited opportunity to observe the robber's appearance; (b) weaknesses in the identification evidence and in particular the importance of the witness who said the person he saw was *not* present; and (c) the failure of the judge to follow

Turnbull Guidelines in his handling of the identification evidence. The case is heard at the Court of Appeal in September 1993 and Professor Davies attends, ready to give expert evidence. However, the judges after hearing legal submissions decide to quash the conviction on the basis of the procedural errors: they make it clear they do not wish to set a precedent by hearing evidence from a psychologist on identification issues. A re-trial is ordered and duly takes place in Birmingham in October 1993. By this time, one workman witness has died and the other cannot be traced. The Crown decides to abandon its position that the March stranger and the May robber are one and the same person and rely on the jeweller's evidence. Professor Davies attends once again, ready to give evidence and once again, is not called, though the defence uses parts of his report. At the end of the trial, the jury take just 20 minutes to find Davis not guilty.

4 AUSTRALIA, NEW ZEALAND AND CANADA

Expert testimony by mental health professionals in Australian and New Zealand courts has been allowed, for example, for sentencing, post-accident impairment, competence to stand trial, criminal responsibility, capacity to work, degree of mental retardation, trauma suffered by victims of crime, behaviour of victims, insanity defence, operation of memory, trademark infringement and fraudulent advertising, causation of death as a result of mental state, custodial and access arrangements and effects of discrimination (Freckelton, 1990:66). Interestingly enough, the existing precedent (*Johnson and Johnson*, unreported Full Court of Family Court of Australia, 7 July 1997) offers but limited support to the parental alienation syndrome (Freckelton and Selby, 2005:439). Some encouraging evidence that courts in Australia and New Zealand are readier to admit expert testimony by psychologists than allowed by a strict interpretation of the rule in *Turner* is to be found in the New Zealand case of *R v. Taaka* [1982] 2 NZLR 198 in which psychiatric evidence was admitted to show that the defendant had an 'obsessively compulsive personality' and in *R v. Leilua* [1985] NZ Recent Law 118 pertaining to chronic post-traumatic stress disorder. Despite such encouraging signs, the fact is that, as in England, rules of evidence in Australia and New Zealand (see *Murphy v. R*, 1989, 86 ALJ 35; *Smith v. R*, 1990, 64 ALJR, 588), especially the 'common knowledge rule' from *Turner*, constrain the kinds of expert evidence that can be given by psychologists in Australian courts (Freckelton, 1990; see also, Freckelton and Selby, 2005). Thus, 'during the past decade evidence from mental health professionals has been disallowed on the working of memory [*R v. Fong* [1981] Qd R 90; *R v. Smith* [1987] VR 907 at 910–11, (1990) 64 ALJR 588], the typical behaviour of children after they have been molested [*R v. B* [1987] 1 NZLR 362], the likelihood of a defendant having made a particular record of interview to the police [*Murphy v. R* (1989) 86 ALR 35]' (Freckelton, 1990:49), and polygraph evidence

(New South Wales District Court in *R v. Murray* (1982) 7 A Crim. R 48; *Mallard v. The Queen* (2003) 28 WAR 1; WASC 296).

Drawing on Freckelton and Selby's (2005) discussion of the admissibility of profiling evidence, it can be said that courts in England and Wales will readily admit psychological profiling evidence (see *Gilfoyle* [2001] 2 Cr.App.R. 57) and, similarly, in Canada, the Supreme Court's decisions in *R v. Mohan* [1994] 2 SCR 9; (1994) 89 CCC (3d) 402 and in *R. v. J-L* [2000] 2 SCR 600; 148 CCC (3d) 487 'have opened the door to criminal profiling evidence' (Freckelton and Selby, 2005:454). The two recent decisions in Canada in *R v. Ranger* (2003) 178 CCC (3d) and *R v. Clark* (2004) 182 CCC (3d) mean that profiling experts may well be allowed to testify if they confine themselves to explaining to the court what the crime scene shows and how the crime was committed and why they believe the defendant behaved in a particular way and what attributes the offender is likely to possess (p. 454).

Canadian courts have disallowed expert evidence on the operation of memory (*R v. M. (W)* (1997) 115 CCC (3d) 233) and eyewitness identification (*R v. McCarthy* [1997] 117 CCC (3d) 385). Finally, as far as hypnosis is concerned, the leading judgement is that of *R v. Jenkyns* (1993) 32 NSWLR 712, which followed the view of the New Zealand Court of Appeal in *R v. McFelin*²² (1985) 2 NZLR 750 at 753 that, unlike some jurisdictions in the United States and France, 'there is no rule in Australia that hypnotically induced testimony is per se inadmissible' (Freckelton and Selby, 2005:164). Freckelton and Selby conclude their discussion of the common knowledge rule regarding expert hypnosis evidence stating that: 'It is likely that evidence that is hypnotically induced will from time to time be excluded as more prejudicial than probative when led by the prosecution' (p. 166).

Three interesting developments in Australia are the *Evidence Act 1995* (Cth) and *Evidence Act 1995* (NSW) and the *Evidence Act 2001* (TAS). Section 80 of the Cth Act and s.137 of the NSW Act 'abolish the common knowledge exclusionary rule' (Freckelton, 1996) and the abolition is 'in the form of an opinion not being inadmissible "only because it is about" a matter of common knowledge' (p. 31). Writing about expert testimony in repressed memory syndrome (see chapter 3), Freckelton (1996) stated that, 'since the focus of the legislation is upon weighing the probative value of expert evidence against its potential for unfair prejudice' and 'Given the current profound division of opinion among psychiatrists and psychologists', the provisions of the new legislation 'should result in the exclusion of expert evidence concerning repressed memory syndrome' (p. 31). However, the Victorian Court of Appeal in *R v. Bartlett* (1996) 2 VR 687, decided that, in certain circumstances, the defence in criminal trials may adduce suitably qualified expert evidence about the unreliability of recovered memories (see Freckelton, 1997a). Freckelton points out that the decision in *Bartlett* needs to be assessed in terms of the same court's repudiation of an 'area of expertise' rule and the fact that the judgement does not contain arguments about the probative value of such expert evidence as against its prejudicial impact (p. 241).

As Freckelton et al. (2001:6) point out, unlike the United States and Canadian Supreme Courts, the High Court of Australia has had no occasion to articulate, in a comprehensive way, the criteria for admissibility of expert evidence at common law. In this context, there is the threshold question of whether there is an 'area of expertise' test in the way one exists in the United States, Canada and New Zealand. Freckelton et al. surmise that such a test does not exist under the *Evidence Acts 1995* (Cth and NSW). The same authors' analysis of the same legislation leads them to conclude that in Australia, 'there are several aspects of the expert evidence presented in courts that await final determination at appellate level' (p. 6). More specifically, Freckelton et al. maintain that the two Acts 'simplify the common law exclusionary rules of expert evidence by (apparently) abolishing the common knowledge and the ultimate issue rules and omitting both the basis and the area of expertise rules' (p. 6). Consequently, since the 'area of expertise rule' exists at common law, expert evidence is admissible only if the expert is a specialist by virtue of training, study or experience in the absence of any judicial guideline like those in *Daubert* or *Kumho* in the United States. Meanwhile, psychologists in the Antipodes may take comfort in Hampel J's decision in the criminal case *Whitbread v. The Queen* ((1995) 78 A Crim R 452) that 'there is no reason why a psychologist may not be just as qualified or better qualified than a psychiatrist to express opinions about mental states and processes' (cited by Freckelton, 1997b:75). It is probable that Australian expert law will be significantly influenced by the *Daubert* decision because: 'It provides a sophisticated means of distinguishing between evidence that is not yet capable of being effectively evaluated by the courts from that which is falsifiable and has been tested within the medium of peer review and debate amongst those constituting the intellectual marketplace' (Freckelton and Selby, 2002:88).

Drawing on Freckelton and Selby's comprehensive analysis (pp. 90–3) of New Zealand authority, in two unreported cases decided by the High Court of New Zealand, namely, *R v. Calder* (12 April 1995) and *R v. Brown* (19 September 1997), significant endorsement was given to the *Daubert* test. As far as Canadian authority on the admissibility of expert evidence is concerned, 'The *Calder* and *Brown* decisions leave the law unclear as to both the existence of an area of expertise rule and as to the criteria for the exercise of the prejudice/probative discretion in New Zealand. However, they are an early indication of the extent to which the concept of "reliability" is likely to command influence in the admission of scientific evidence in the post-*Daubert* era. They also tend to suggest the importance of the concept of "falsifiability" as a key measure of "reliability" for New Zealand' (Freckelton and Selby, 2005:93).

Canadian courts have generally admitted expert testimony on a broader range of issues instead of focusing narrowly on mental illness, as has been the approach of courts in England, Australia and New Zealand.²³ While the impact of the *Daubert* decision on Canadian courts is difficult to predict, it is interesting to note that in *R v. Johnston* ((1992) 69 CCC 395) (a DNA case) it was held that the *Frye* test was not part of Canadian law and that the criteria for admissibility for novel scientific

evidence were relevance and helpfulness to the tribunal of fact, helpfulness to be decided by considering a list of 14 factors. The factors in *Johnston* go beyond those stated in *Daubert*.²⁴ Freckelton and Selby state that the most important Canadian decision concerning the admissibility of expert evidence is *R v. Mohan* ([1994] SCR 9; 1994 89 CCC (3d) 402), in which the Supreme Court determined (at 404) that the question of expert evidence admissibility is to be decided by applying the following four criteria: relevance; necessity in assisting the trier of fact; the absence of any exclusionary rule; and a properly qualified expert (p. 85). The *Mohan* approach has been applied by the Supreme Court of Canada in *R v. J-LJ* ([2000] SCC 51) and *R v. DD* ([2000] SCC 43) (Freckelton and Selby, 2005:9686).

With the support of the Australian Institute of Judicial Administration and the National Institute of Forensic Science, Freckelton et al. (2001) carried out the first national survey of magistrates' perspectives on expert evidence. Of the total of 401 magistrates 203 (50.6 per cent) agreed to take part in the questionnaire survey. Eighteen months earlier, the same authors had carried out a similar nationwide survey of Australia's judges and had a response rate of 60 per cent. Three-quarters of the magistrates who responded to the survey had served for more than six years, with half having served more than 10 years, while about one-third had sat in children's or juvenile courts. According to Freckelton et al. (2001), while more than three-quarters of both responding judges and magistrates found expert evidence to be 'often useful', many magistrates were concerned about a percentage of experts who lack objectivity, are unable to be clear communicators and, related to these, a low quality of advocacy and the magistrates' own difficulty in evaluating conflicting expert views. It is a sobering thought, perhaps, that when it comes to deciding which, if any, of the experts and their opinions a magistrate should rely upon, the majority could remember occasions when they did not evaluate the expert evidence adequately in the cases they were hearing and also experienced difficulty evaluating the opinions expressed by one expert as against the opinions expressed by another. More than half of the respondents were of the view that the courts are not a place where the reliability of expert theories and opinions can be evaluated adequately. Finally, the magistrates were in favour of training to improve the performance in court of expert witnesses and lawyers alike. The need to develop codes of ethics for forensic experts in Australia and elsewhere (see Freckelton and Selby, 2005:815–71) is evident in the fact that already there exist the following:

- the Federal Court of Australia's *Guidelines for Expert Witnesses*
- Practice Direction No. 3 of 2002 of the Supreme Court of the ACT
- Schedule K of the New South Wales Supreme Court *Rules*
- Direction 46 of the South Australian Supreme Court *Rules*
- the State of Victoria Civil and Administrative Tribunal's *Practice Direction Concerning Expert Witnesses*
- *New Zealand High Court Rules* (324–330D)
- *Civil Procedure Rules* (UK).

5 THE IMPACT OF EXPERT TESTIMONY BY PSYCHOLOGISTS

In his controversial critique of expert testimony about eyewitness identification Elliott (1993:433) argues that, 'we do not know very much about the factors contributing to eyewitness accuracy. We are also very far from knowing what the effect of expert testimony is, except that un-cross-examined experts for the defence have sometimes caused reductions in conviction rates (Loftus, 1980).' Elliott also expressed the view that 'it remains premature to draw conclusions either about what we know or what our effect is on jurors or juries' (p. 433). Elliott concluded his critique by urging the adoption of three prudential rules on the basis that the present state of knowledge does not justify psychologists testifying as experts to the extent that they do. Kassin et al. (1994) have criticised Elliott (1993) for: (a) the eyewitness literature and the experts who use it; (b) 'because his critique merely parrots complaints of the past' (p. 203); and (c) for misrepresenting the results of the Kassin et al. (1989) survey of 63 eyewitness identification experts (p. 207). On the basis of the US Supreme Court's ruling in the *Daubert* case (that the general acceptance of a point of view within a particular field of expertise is a major criterion for admitting expert testimony in the United States) it would appear that Elliott's (1993) conclusions are not shared by the majority of the experts in the eyewitness identification field (see chapters 2, 3 and 10).

Testimony by an expert witness can have a significant effect on the outcome of a trial.

There is encouraging evidence that where expert testimony is provided it does influence cases. Available empirical evidence suggests that expert testimony pertaining to characteristics of sexually abused children does impact on jurors' decision-making (Cutler et al., 1989), that expert testimony in child sexual abuse cases has been generally admitted by courts in the United States and when challenged on appeal it is again admitted in more than half of the cases (Mason, 1991). Using data in trial court transcripts, Mason (1991) surveyed 122 appellate court decisions in both civil and criminal cases in which expert witness testimony on the characteristics of abused children provided by a total of 160 experts was challenged. Thirty-one

The impact of an expert testifying in a real case in court can vary, of course, from the size of damages awarded in a civil suit, jurors' assessment of a witness' reliability, to a jury's verdict in a criminal case and even the freeing of persons wrongly convicted and imprisoned for life.

per cent of the experts concerned were clinical psychologists. It was found that in over half of the cases (55 per cent) the expert testimony was allowed on appeal and in 9 per cent the evidence was partly admitted; in those cases where the courts rejected the expert witness testimony they did so mainly on the grounds that the testimony went to the issue of the child's credibility, something that, in evidence law, is for the jury to decide and not for an expert witness. Mason concluded that expert testimony informing the court about the weight of the evidence in the relevant literature pertaining to sexually abused children's willingness to remember, the accuracy of their recall and vulnerability to suggestive questioning, can indeed assist the judge or jury to evaluate a child's testimony.

Drawing on Krauss and Sales' (2001:274–5) discussion of the literature, researchers have reported that juror decision-making is influenced if expert testimony is presented on the following issues:

- the fallibility of eyewitness identifications
- clinical syndromes (for example, battered wife syndrome, rape trauma syndrome, child sexual abuse syndrome, and depressed memory syndrome)
- insanity
- future dangerousness of a defendant.

However, the mechanism by which expert testimony affects juror/mock-juror decision-making 'is poorly understood' (p. 274). Available evidence suggests that an expert witness' gender may play a role in the impact of expert testimony on juror decision-making. Experimental simulation work on the battered woman syndrome has found that expert testimony correlates with verdict leniency, especially when mock jurors are told they are free to disregard the law if they believe a strict application of the law would result in an unjust verdict (Schuller and Rzepa, 2002). For her PhD thesis at the University of Kentucky Lynne Robin Branca examined the impact of different levels of rape trauma reactions testimony (RTR) on mock jurors. She found that while the subjects' level of empathy for the rape victim was not affected by expert testimony, there was a statistically significant relationship between not having been exposed to RTR testimony and finding the defendant not guilty. Branca concluded that juror decision-making may be less influenced by RTR expert testimony than previously thought. However, such findings should be treated with caution in view of the lack of evidence about the ecological validity of research methodology used. In an Australian experimental study by Schuller et al. (2001) undergraduate students were presented with a modified version of a civil trial involving anti-trust price-fixing violation by two defendant suppliers. The gender of the plaintiff's expert witness was manipulated, as was the industry within which the violation took place stating it was either: (a) the construction, or (b) the women's clothing industry. It was found that expert testimony by a male expert was more influential when there is congruency between the gender of the expert and the domain of the case. One serious limitation of Schuller et al. is that the decisions of individual mock jurors may be different from actual jury verdicts reached by jurors after deliberations (p. 77). Finally, Bornstein (2004) reported that in a personal injury case the expert witness had greater impact on mock jurors' verdict when presenting anecdotal case histories than experimental data and, also, that the expert's perceived credibility correlated with the subjects' liability judgements. A possible explanation for Bornstein's results may be the fact that mock jurors are more likely to be influenced when the expert explicitly links the research findings to the case at hand (Kovera et al. 1996).

The impact of an expert testifying in a real case in court can vary, of course, from the size of damages awarded in a civil suit, jurors' assessment of a witness' reliability, to a jury's verdict in a criminal case and even the freeing of persons wrongly convicted and imprisoned for life. According to Gudjonsson (2002), the convictions in 23 high-profile murder cases in England and Wales were quashed on appeal during the period 1989–2002. In more than half of those cases it was expert testimony concerning the appellant's psychological vulnerability, rather than coercive or oppressive interviewing, that contributed to the court's decision to find the confession unreliable (see also chapter 10). Such was the case of Patrick Kane.

Adversarial vs Court-appointed Experts' Influence on Jurors/Mock Jurors

In a mock-juror study by Cooper and Hall (2000) subjects were presented with a civil case with testimony about a plaintiff's injury in a car accident. The researchers systematically varied information about who hired the expert (each side or court-appointed), with whom the expert sided (the plaintiff or the defendant) and, finally, the type of plaintiff involved (whether an individual or a corporation). It was found that the mock jurors sided with the court-appointed expert except when the expert favoured a corporate rather than individual defendant.

6 APPEARING AS EXPERT WITNESSES

An expert testifying usually conjures up an image of a person doing so in a court. However, it is no longer necessary for an expert to be physically present in a court in order to testify. It is generally accepted that one important cause of delays in child care proceedings is the availability of experts. In England and Wales, the *Protocol for Judicial Case Management in Public Law Children Act Cases* (issued in June 2003) identified the use of video conferencing equipment as one way to reduce delays in care proceedings. According to the British Psychological Society's *Working Party on Psychologists as Experts Witnesses*, mobile conferencing equipment, made available by Her Majesty's Courts Service, has been used effectively, making the process of obtaining expert evidence more efficient and, thus, reducing the time taken to resolve a child-care case. Poor evidence by psychologists appearing as experts can be very damaging for psychologists in general, undermining the positive impact which psychologists can have on developments within the legal system, and can have a disastrous effect on individual cases, causing miscarriages of justice (Gudjonsson, 1993). For Gudjonsson, poor psychological evidence is testimony that, first, does not inform and, second, is misleading or incorrect. Furthermore, the characteristics of such poor evidence are 'poor preparation, lack of knowledge and experience, low level of thoroughness, and inappropriate use or misinterpretation of test results' (p. 120).

Advice for forensic psychologists, as for other expert witnesses,²⁵ who wish to avoid the embarrassing and unpleasant experience of seeing their expert testimony being distorted and their professional reputation damaged, includes:

- being very familiar with courtroom procedure, rules of evidence and ways of presenting psychological data to a bench or a jury, as well as being aware of the conduct expected of an expert witness (Wardlaw, 1984:135, 137)
- having well-prepared reports and other evidence and, if inexperienced, to undertake some training in how to best handle lawyers' cross-examining (Carson, 1990; Nijboer, 1995)
- stick to one's own area of expertise and be explicit and open (Nijboer, 1995)
- novice expert witness psychologists can also benefit from having in mind a number of criteria by which to judge their testimony when preparing for it (see Newman, 1994) and, equally important, to be familiar with what advice is given lawyers about how to cross-examine a psychologist (see Mulroy, 1993).

American attorney Michael Lee²⁶ lists the following top five mistakes expert witnesses make: (a) relying only on information provided by the lawyer; (b) forgetting that he/she is an advocate for his/her own opinions and methodology but not for the case itself; (c) putting too much in writing, too soon and too casually; (d) being myopic; and, finally (e) sounding too much like an 'expert'. Regarding cross-examination, Wardlaw (1984) lists a number of rules likely to prove helpful for the witness. *Inter alia*, these include:

- answer all questions and do not allow counsel for the other side to put words in your mouth. Don't make guesses, and take as much time as you need to reply to questions
- if under attack keep calm and avoid getting angry or unreasonably defensive
- prepare for the cross-examination by trying to anticipate the questions by imagining that you are the one who is to cross-examine.

In providing advice on the art of advocacy, Evans (1995) reminds his readers that even experienced expert witnesses have been known to 'just come apart like wet cardboard toys when actually giving evidence' (p. 72) and urges them to remember that 'nobody – not even the ultimate leader in the field – knows everything about his subject' (p. 165). Mauet and McCrimmon (1993) are more specific in their advice on how to best cross-examine an expert witness. They suggest first to obtain from the expert admissions favourable to one's client, then to discredit unfavourable evidence and, finally, to impeach the expert him/herself (p. 203). The same authors list a number of cross-examination techniques, including:

- Build up the expert's field of expertise, and then proceed to show that it is not directly relevant to the issue facing the court.

- Use hypothetical situations to show that the expert would in fact agree with your presentation of the facts of the case or to show that the expert's credibility is doubtful because of apparent rigidity against considering other possible interpretations of the fact at issue.
- Demystify the expert's apparent self-importance by obtaining from him/her definitions of technical terms in simple, everyday language.
- Cast doubt on the thoroughness with which the expert has obtained his results.
- Get the witness to admit that in the past other experts are known to have disagreed with him/her on the issue concerned (pp. 203–6).

CONCLUSIONS

The courts in the United States, Canada, England, Australia and New Zealand have opened the door to psychologists to testify as expert witnesses. In a number of areas, (for example, psychological research on hypnosis, child abuse witness credibility (unless the syndrome evidence has been framed as a medical condition, Freckelton and Selby, 2005:407) and the polygraph, however, the courts have disallowed such evidence. Psychologists as expert witnesses in English-speaking common law countries have appeared in cases involving child sexual abuse (see Mason, 1991), child custody cases (Mulroy, 1993), the battered woman syndrome (Breyer, 1992), eye-witness testimony (Elliott, 1993; Kassin et al., 1994; Loftus and Ketcham, 1991), post-traumatic stress disorder, profiling and false confessions (Gudjonsson, 2006).

The significance of the US Supreme Court's important judgements in *Joiner* and *Munho*, that followed in the wake of the *Daubert* decision in 1993, is dependent on American judges' ability to understand and implement crucial concepts in *Daubert*, but empirical evidence points to the contrary for the great majority of the American judiciary. This knowledge is a cause for concern. Post-*Munho* decisions such as *United States v. Plaza* 188 F Supp 2d (2002) show a preparedness by courts in the United States to admit expert testimony concerning a technique that may not be based on falsifiable theory but enjoys general acceptance within the community of its practitioners. In other words, American courts do not appear to adhere to a strict application of the *Daubert* criteria for admissibility of expert evidence as had been feared. In England and Wales further relaxation of the *Turner* rule is evidenced in the Court of Appeal's admitting in a number of cases, such as that of Patrick Kane, expert testimony by forensic psychologists on a defendant's psychological vulnerability (that is, his/her suggestibility) to make a false confession to the police while in custody; in addition, the same court's decision in *R v. Bowman* that it should have the benefit of any development in scientific thinking, including expert testimony about scientific knowledge and techniques that are at the stage of hypothesis. Thus, the courts in England and Wales do not seem to consider 'general acceptance' as the main admissibility criterion for expert testimony as do American courts.

Gudjonsson (1995b:56) reminds us that empirical research by psychologists has influenced 'legal structures, procedures and case law' in the United States in such areas as eyewitness testimony, prediction of dangerousness, forensic hypnosis and lie-detection. Similarly, legal researchers in the UK have influenced the development of police procedures in interviewing suspects and the admissibility of expert testimony on whether a witness is suggestible (pp. 56–7). Unfortunately, an opportunity to reform the law of evidence in England regarding the admissibility of expert testimony by the Royal Commission on Criminal Justice (1993) (the *Runciman Report*) has been missed. Despite the fact that the Commission called for a greater opportunity for experts to educate tribunals of fact, its report: (a) took a myopic view of the issue of court experts, and (b) by means of 'bizarre reasoning' – that such a move would 'lead to a confusion of roles and prevent the cross-examination of expert witnesses' – rejected a proposal for a forensic science service that would be independent of both the prosecution and the defence and which would be appointed by the courts (Redmayne, 1994:157–8).

As far as Australian courts are concerned, by not admitting expert testimony by mental health professionals on the working of memory, pitfalls in identification evidence, the typical behaviour of children after they have been sexually abused or how likely it is that a record of interview presented by police was in fact made by the defendant, they deny 'the assistance of specialist information possessed by mental health professionals which may provide insights into a range of matters germane to the proof of a defendant's guilt or innocence' (Freckelton, 1990:49). The need for evidence law reform in Australia at State level (as in NSW and Tas) along the lines of the Commonwealth Act cannot be overstated. Explicitly abolishing the common knowledge rule in the rest of Australia's jurisdictions, in the UK and New Zealand would be a significant first step in the right direction. One cannot but agree with Freckelton that, when a theory is sufficiently acknowledged by the experts in a given field to be reliable and characterised by scientific integrity, 'surely it is only arrogance and foolhardiness for the law to close its eyes to knowledge and understanding which is germane to its decision-making practices' (p. 65).

Despite the empirical evidence that expert testimony impacts on trial outcome, for those sceptical of the need for expert testimony in court, Sheldon and McCleod (1991) list three alternatives, namely: (a) making use of a psychologist's expert report on particular legal issues pertinent to a trial to cross-examine witnesses; (b) introducing independent forensic psychologists as part of an independent forensic science service; and (c) providing lawyers with much-needed training in psychology. Writing about the judiciary in England, Thornton (1995) has also canvassed the need for judicial training in areas of forensic psychology. In the future, judgments in individual cases in England, Australia and New Zealand, but less so in Canada where there is a lesser need, may well significantly reduce current restrictions to the admissibility of expert evidence. This, however, is a process that is likely to take a long time. An alternative would be to let the tribunal of fact decide

whether a particular case calls for expert evidence. Finally, parliament could codify the new limits of admissibility (Thornton, 1995:148). As Landsman (1995) accurately predicted, ‘a great deal is likely to happen during the next decade’ in the domain of expert evidence (p. 157).

REVISION QUESTIONS

- 1 What is the role in court of an expert witness in general, and a forensic psychologist in particular?
- 2 What does the term ‘common knowledge rule’ mean?
- 3 What is the gist of the US Supreme Court’s unanimous decision in *Daubert*?
- 4 How do the subsequent judgements in *Joiner* and *Munho* modify the *Daubert* guidelines on the admissibility of expert testimony?
- 5 How valid is the assumption that American judges are capable of making judgements about the scientific reliability and validity of proffered scientific evidence based on adequate understanding of crucial concepts in *Daubert*?
- 6 What do you know about the admissibility of expert forensic psychological evidence in the United States, England, Australia, New Zealand and Canada?
- 7 Under what conditions does expert testimony by psychologists impact on trial outcome?

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8

DETECTING DECEPTION

CHAPTER OUTLINE

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Lying is not a distinct psychological process with its own unique behavioral indicator.

(DePaulo and Morris, 2004:17)

Lies are everywhere. We hear continually about lying in public and private life. Very few people would claim never to have told a lie, and even fewer would say they have never been duped by a liar.

(Barnes, 1994:1)

Human beings hate to be deceived. It makes us feel violated, used and stupid... The intellectual and moral traditions of Western culture have been shaped and driven by an explicit and consistent fear of deception... but... without such lies humanity cannot survive.

(Rue, 1994:4–5)

Not every deception involves emotion, but those who do may cause special problems for the liar. When emotions occur, physiological changes happen automatically without choice or deliberation.

(Ekman and O'Sullivan, 1989:299)

INTRODUCTION

Unlike the land of the Houyhnhnms that Gulliver came across in his travels where there was no word to express deceit, deception in general and lying in particular is a global phenomenon whose occurrence varies across cultures but is characterised by a few pan-cultural beliefs about cues to deception¹ such as gaze-aversion (see Bond and Rao, 2004; Global Deception Research Team, 2006). A moment's reflection tells us that deception implies that someone intentionally does or says something in order to induce a false belief in someone else (Ekman, 1985; Miller and Stiff, 1993:16–31; Vrij, 2000:6). Miller and Stiff have argued persuasively that a useful approach to studying deceptive communication is to conceptualise it as a general persuasive strategy, that is, as a means to an end and not an end in itself. Others, however, advocate using a discourse-centred definition rather than the intent criterion (Bavelas et al., 1990). Deception, as old as human existence, is a social phenomenon that permeates human life, irrespective of context, or one's age, gender, education or occupation. The internet provides endless opportunity for deception. 'Deception includes practical jokes, forgery, imposture, conjuring, confidence games, consumer and health fraud, military and strategic deception, white lies, feints and ploys in games and sport, gambling scams, psychic hoaxes, and much more' (Hyman, 1989:133). Similarly, the unfair 'manipulation' of securities markets by unscrupulous individuals or entities can wreck the life of law-abiding investors by depriving them of their personal savings, cause public companies to collapse and impact adversely on the economies of countries, with dire political consequences for governments (Pickholz and Pickholz, 2001:117).

Deception makes possible sale swindles and export scandals and can cause political scandals that bring about the downfall of politicians. Deception in the form of fraudulent reporting of research data and findings has been perpetrated by well-known scientists (see Humphrey, 1992) and routine use of deception in psychological experiments has increased in popularity and given rise to ethical debate (Fisher and Fyrberg, 1994). The use of an alias is a common practice among incarcerated offenders (Harry, 1986). Deception in the form of undercover operatives is standard practice by police and security services, as is disinformation (see Marx, 1988; Wright, 1991).² In fact, 'Lying and other deceptive practices are an integral part of the police officer's working environment' (Barker and Carter, 1994:139).

A lie is a statement intended to deceive (Barnes, 1994:11;³ Vrij, 2000:6) and is but one mode of deception. According to Barnes, lying is ubiquitous in some cultures and is abundant in such ambiguous domains as politics, advertising, bureaucracies, courts and the police (pp. 2, 35–54). In fact, lying has been shown by DePaulo et al. (1996) to be a frequent daily occurrence for people. DePaulo et al. asked college students and members of the public in the United States to keep a diary for seven days and to record details of their social interactions of at least 10 minutes' duration, including all the lies they told during those interactions.

Lying is an essential interpersonal skill that is ubiquitous in some cultures and abundant in advertising and politics, for example.

They found that lying is a frequent daily event. Of their interactions with others, they lied 25 per cent in a day, 34 per cent over a week, they felt comfortable lying, were generally successful as liars and were detected by others only 18 per cent of the time. As to why people lie, the researchers reported five reasons: to impress others/avoid embarrassment/disapproval; to obtain an advantage; to avoid punishment; to benefit others; to facilitate social relationships. Of course, people lie for a reason (Vrij, 2000). DePaulo et al. (1996) termed a lie told to gain an advantage (for example, business executives lying in order to influence the value of their company's shares) and a lie to make a positive impression on other people as *self-oriented* (that is, meant to benefit the liar personally), and a lie told to benefit other people as *other-oriented* and, finally, a lie to safeguard a social relationship as both self- and other-oriented. As far as gender differences are concerned, DePaulo et al. found that: (a) women are more inclined to tell other-oriented lies whereas men tell more self-oriented lies; and (b) women become more uncomfortable when they tell lies than do men. Regarding how much lying is condemned cross-culturally, a World Values Survey by Inglehart et al. (2001) in 43 societies posed the question 'Is lying in your interest ever justified?' and found that people in Bulgaria and South Korea exhibited the 'strictest morality' with 70 per cent responding that self-interested lying is never justified, while the participants in the Netherlands and Germany had the 'least moral' position with 25 per cent agreement. Self-interested lying was more likely to be condemned by females, people over 50 and the least educated respondents.

Barnes (1994) points out that the meaning generated by a written statement may vary according to the context in which it is read (p. 166), liars often dupe friends rather than enemies (p. 166) and in the twentieth century lying became more institutionalised and an established practice by elite liars (p. 167). But people today are more aware of the prevalence of lying, largely because public lying is often exposed sooner than it was in the past (p. 1). Barnes also reminds us that a spoken or written lie can consist of 'either true or false statements or statements that are partly true and partly false' and draws attention to the fact that the truthfulness and deceit of a statement 'refers to the intention of the liar, and not the actual state of the world' (p. 12). Finally, while the focus in everyday life and in the empirical literature is on the spoken or written lie, Vrij (2000) emphasises that one does not need to use words in order to lie and gives the examples of the athlete who fakes a foot injury after a bad performance without saying anything, and the taxpayer who intentionally does not report details of additional income in his/her tax return (p. 6). Even silence can be a means of deception as seen when we speak of 'pregnant silences' (Barnes, 1994:17). Taking deception to be an act involving at least two people, this chapter will not discuss self-deception.

According to Vrij (2002), the essential components of the concept of lie are four: it is intentional, no prior warning is given, it is defined from the point of view of the deceiver only who knows that what he/she says is untrue and, finally, it always involves at least two people. 'Confabulation' is differentiated from lying,

because it refers to cases where a person is not conscious of lying, as well as from 'pseudological fantastica' or 'pathological lying' which is a feature of certain personality disorders in which a person believes his/her own fantasies and acts on them (Bartholomew, 1983:174–5). As far as categories of lies are concerned, DePaulo et al. (1996) distinguish three categories: (a) outright lies, (b) exaggerations, and (c) subtle lies (for example, former US President Bill Clinton's well-known statement on television that he 'did not have sexual relations with that woman, Miss Lewinsky'. People can also lie in a subtle way by evading the question (see below) or not divulging relevant details (Memon et al., 2003:8).

The law generally defines a number of criminal and civil offences that involve deception and provide for sanctions. Criminal offences include obtaining property by deception and obtaining a financial advantage by deception.⁴ The Corporations Law also provides for such offences as fraudulent trading. Making a false complaint to the police or lying in court, if found out, are criminal offences. Most countries also have consumer-protection legislation that prohibits deceptive advertising, while the use of deceit could render a contract invalid. Deception and its detection is, without doubt, a topic of great interest to psychologists, lawyers and law-enforcement personnel alike. While deception offences are not responsible for people's paralysing fear of crime in big cities, the financial cost is astronomical. This chapter is concerned with lie-detection and in parts draws on Vrij (2000, 2007), Granhag and Vrij (2005) and Granhag and Hartwig (2008a).⁵

According to Hyman (1989): 'The early years of psychology's existence as an independent science offered the strong possibility of a psychology of deception' (p. 134). However, the rise and dominance of behaviourism in the United States at the start of the twentieth century left no room for associationist, mentalistic psychology and eclipsed the promising work of pioneers like Binet (1896), Dessoir (1893), Jastrow (1900) and Triplett (1900). The focus of these early deception scholars focused exclusively on demystifying conjuring tricks.⁶ Despite the significance, the enormity and heterogeneity of deception, it is disheartening to find that we cannot, as yet, speak of a psychology of deception in the same sense as we can talk about a psychology of memory. No single, coherent framework has been put forward that can adequately account for the broad range of psychological issues involved in the plethora of deception contexts 'in terms of a coherent set of interrelated psychological propositions' (Hyman, 1989:143). As this chapter shows, most of the attention by psychologists has been focused on lying (see Ekman, 1985) and lie-detection, and detection can be assisted by drawing on sub-areas within psychology, such as physiological, clinical, developmental, cognitive and social psychology.⁷ Interrogation techniques are discussed in chapter 11 as an example of psychology's contribution to law enforcement.

Since the second edition of this book, a number of excellent reviews of the literature on cues to deception and deception-detection methods have been published by some of the internationally best-known authorities in this area (see DePaulo et al., 2003; Granhag and Strömwall, 2004a; Granhag and Vrij, 2005; Granhag

and Hartwig, 2008a; Vrij, 2003, 2007, 2008). The basic aim of this chapter is to provide an overview and arrive at conclusions on the basis of the weight of the empirical knowledge available about the main methods for detecting lies.

1 PAPER-AND-PENCIL TESTS

A survey by Harding and Phillips (1986) of 10 west-European countries found that in nine of them people ranked honesty as the most important quality they wished to pass on to their children. Having honest employees is vital to the success of business and the public sector alike. Not surprisingly, therefore, if an employee is found to have provided false information in their employment application/interview, he/she will often be dismissed. It is well-established in criminology that theft by employees costs the private and public sectors all over the world a great deal of money, sometimes resulting in the collapse of companies. There is, therefore, a big incentive for employers to try to screen out potential thieves among job applicants. This practice is very widespread in western countries. In the United States, the *Employee Polygraph Protection Act 1988* prohibits the use of the polygraph (see below) in screening applicants for jobs except for local, State and federal personnel, members of the armed forces and the various secret services, security personnel guarding nuclear power stations, water supply facilities and those working in financial security businesses (Camara and Schneider, 1994). Since the Act was introduced there has been a lot of interest in what are commonly referred to as integrity or honesty tests. Such paper-and-pencil tests are used at the selection stage in an attempt to identify and minimise risks pertaining to employee theft, for example. In other words, they are said to be tests of potential employee trustworthiness (Goldberg et al., 1991). Possible reasons for the use of integrity/honesty tests include: the need for employers to reduce a large number of applicants for a small number of positions; the existence of applicants without prior employment history; and, finally, the increasing unpreparedness by employers worried about libel suits to supply frank references concerning ex-employees.

Integrity tests are also used, though to a lesser degree, in post-employment investigations of employee misbehaviour such as theft. Whether the tests are used in a pre- or post-employment context, some authors assume that certain characteristics of individuals are stable over time and are useful in determining whether an individual is capable of dishonest behaviour (Sackett, 1985). Other authors assume that situational factors are more important in understanding why people cheat and so forth, than are characteristics of their personality (Hartshorne and May, 1928). It seems unlikely that the person vs situation debate will be resolved in the near future, a factor that would appear to undermine the future of integrity testing.

There are two main types of integrity tests: overt and personality-based. The former measure attitudes towards theft. Personality-based ones, on the other hand, are supposed to measure traits such as conscientiousness (Wooley and

Hakstian, 1992). Of course, paper-and-pencil tests are but one method of testing for integrity that can be supplemented with a face-to-face interview, applicant background checks or, finally, graphology (that is, handwriting analysis; see Ben-Shakhar, 1989). The predictive utility of graphology in the pre-employment context is rather doubtful (Murphy, 1995:223–4).

According to Camara and Schneider (1994:113), a survey of publishers of integrity tests carried out as part of the Goldberg et al. (1991) study by the American Psychological Association found that the constructs measured by 24 such tests were counter-productivity (15) honesty (9) job performance (9) attitudes (8) integrity (6) reliability (4) and ‘other’ (12). The last category, *inter alia*, includes absenteeism/tardiness, admissions of dishonesty and drug abuse, credibility, dependability/conscientiousness, emotional stability, managerial/sales/clerical potential, probability of short-term turnover, stress tolerance and substance-abuse resistance. Bernardin and Cooke (1993) inform us that different overt tests contain an honesty subscale that is based on five universal constructs, namely:

- 1 thinking about stealing more often than others do
- 2 being more tolerant to those who steal than other people are
- 3 believing most people commit theft regularly
- 4 believing in loyalty among thieves
- 5 accepting rationalisations for theft.

Bernardin and Cooke maintain that these five constructs exist in all the overt tests but different ones measure different areas in addition to honesty. The use of integrity tests raises questions about their reliability and validity as well as broader questions about civil liberty concerns, such as one’s right to privacy. The validity of integrity tests is very difficult to determine, irrespective of whether one validates them against background checks, self-reports of dishonest acts, contrasting those who appear to be honest with persons known to have been dishonest by virtue of their criminal records or, finally, by carrying out before-and-after testing comparisons of a company’s losses (Murphy, 1995:212–15).

Given the very wide use of, and the controversy surrounding, integrity tests, the US Congress Office of Technology Assessment (OTA) (1990) undertook a close and critical look at these tests, as did the American Psychological Association (APA) (Goldberg et al., 1991). Not surprisingly, perhaps, the two bodies used different levels of validity, focused on different studies and arrived at different conclusions regarding the validity and usefulness of such tests. The OTA concentrated on five predictive validity studies. The APA report provides a review of 300 studies covering a broad range of criteria of validity. The OTA report evaluated integrity tests against ‘absolute levels of validity’ (Goldberg et al., 1991:7) using a detected theft or a close approximation to it as their external criterion of validity. The APA report assessed test validity in comparison, for example,

Staunch critics of paper-and-pencil tests of integrity go as far as to propose a moratorium by Congress of their use until they have been independently verified.

with structured integrity interviews. Neither of the reports examined whether such tests accurately predict total job performance (Camara and Schneider, 1994).

The OTA concluded that integrity tests over-predict dishonesty. More specifically, it found that 95.6 per cent of people who are given such tests and fail are incorrectly labelled as dishonest. In fact, the mean average percentage in the five studies examined that was detected for theft was 3 per cent. Camara and Schneider (1994:115) cite studies that used self-reported data and found theft base rates from 28 per cent to 62 per cent (see Hollinger and Clark, 1983, Slora, 1989, respectively). Consequently (and not surprisingly, the cynics might retort!), it is not possible to reach any definitive conclusions about the predictive utility of integrity tests. Camara and Schneider (1994:115) identify three major difficulties in evaluating integrity tests:

- 1 there is no consensus on what is meant by integrity
- 2 there is an over-reliance on cut scores without the standard error of measurement and overlapping score ranges being reported
- 3 publishers are unlikely to encourage independent research into their integrity tests.

Camara and Schneider (1994)⁸ concluded that: ‘there is general agreement that integrity tests can predict a number of outcomes to employers and that they have levels of validity comparable to many other kinds of tests used in employment settings’ (p. 117). Murphy (1995) lists the following caveats to the conclusion that integrity tests are useful: definition of integrity is problematic; the distinction between personality-based tests of integrity and other personality tests is not clear-cut; not informing examinees of integrity test scores when they are unsuccessful in their job applications poses serious ethical problems; from a psychometrician’s point of view, the scoring procedure of some integrity tests is a cause for concern; and, finally, while integrity tests may help to identify high-risks among applicants they are not useful in screening the very honest individuals (pp. 215–17). Camara and Schneider (1994) remind the reader that legislation and the judiciary may one day decide what becomes of paper-and-pencil tests in general, be it personality or pre-employment tests, and that ‘psychologists should wilfully participate in such public policy debates’ (p. 117). One of the debates concerns the question of whether integrity tests should continue to be used in the employment setting in light of their limited predictive utility and their invasion of an individual’s privacy (see Stone and Stone, 1990). The APA’s evaluation of integrity tests, unlike the OTA’s assessment, focused on the scientific validity of the test in employee theft prevention and failed to give due consideration to some of the likely social consequences for job applicants who are wrongly labelled as dishonest and blacklisted by companies whose use of such data is largely uncontrolled and whose test results can convey a false sense of security to other companies.⁹ In view of the extensive use of integrity tests in the United States the practice should be regulated by establishing an agency to oversee the industry concerned and an integrity test result should never be the only criterion

in deciding whether to employ someone. Staunch critics of paper-and-pencil tests of integrity go as far as to propose a moratorium by Congress of their use until they have been independently verified.

2 THE SOCIAL PSYCHOLOGICAL APPROACH

The demeanour of witnesses is relevant in judging their credibility in British courts (Stone, 1991:822): ‘Hence, appeal courts are reluctant to interfere with decisions on veracity by the trial courts which saw and heard the witnesses’ (p. 822). Apparently, the distinguished English judge, Lord Devlin, unlike many of his brethren on the Bench, did not have much faith in his ability to determine whether a witness was lying from his demeanour (Stone, 1991:828). Of course, the judiciary is not alone in believing that lying can be detected from a person’s demeanour (that is, verbal and non-verbal communication) – the general public and many leading psychologists share the same belief.

People generally have an exaggerated belief in their abilities to detect lies in what others say and there is lack of concern about false positive errors of judgement in this context (Vrij, 2000).

In an article published in the *Police Review* Oxford (1991), a serving detective in England had enough confidence as a ‘human polygraph’ to offer advice¹⁰ regarding both non-verbal and verbal cues to deception, which included delayed responses and the use of phrases such as ‘If I remember correctly’ and ‘Now let me see’. However, as detailed below, such confidence does not seem justified on the basis of the existing empirical evidence for verbal and non-verbal cues to deception. People generally have a grossly exaggerated belief in their abilities to detect lies in what others say and there is a lack of concern about false positive errors of judgement in this context (Vrij, 2000).

Beliefs about ‘Lying Behaviour’

People’s apparent inability to discriminate reliably between truth and deception utilising non-verbal cues seems partly attributable to their beliefs about ‘lying behaviour’. Popular beliefs about cues to deception, held by both lay persons and practitioners, have been shown to be generally incorrect.¹¹ As to the origin of such beliefs among law-enforcement personnel, they can be attributed to police interrogation manuals that recommend relying on verbal and non-verbal cues to deception but without generally accepted empirical support for the claims they make (Strömwall et al., 2004:237). To illustrate, Mann et al. (2004) reported that in a sample of real police interviews the more the police officers endorsed views recommended by Inbau et al. (2001) regarding the utility of verbal and non-verbal cues to deception, the less accurate they were in detecting deception. Akehurst et al. (1996) used a 64-item questionnaire to survey police officers and lay people in southern England regarding their own as well as other people’s beliefs about correlates of lying. They found that: (a) people believed that such non-verbal behaviours

as arm and leg movements and self-manipulations (stroking the back of the head, touching the nose, stroking or straightening the hair, pulling at threads of clothing) increase when a person is lying when, in fact, the reverse happens (see below); (b) there were no significant differences between the beliefs of lay people and police officers; (c) there were no significant differences between the beliefs of those who had read literature on deception and those who had not; and, finally, (d) people were more accurate regarding their own than other people's lying behaviour (pp. 367–70). Similar findings have been obtained in Spain by Garrido and Masip (2001). Vrij and Semin (1996) investigated the relationships that police, detectives, patrol officers, customs officers, prisoners and prison guards believed existed between 16 non-verbal behaviours and deception. Police officers were found to have the same stereotyped and inaccurate beliefs about non-verbal cues to deception as non-police. Interestingly, the correctness of prisoners' beliefs was significantly higher than any of the other five groups, which did not differ significantly. In a worldwide study in 75 countries and 43 different languages by the Global Deception Research Team (2006)¹² participants were, *inter alia*, asked 'How can you tell when people are lying?'. Using data from 58 countries, it was found that 63.6 per cent of the participants believed that liars avert gaze (that is, it is a dominant pan-cultural stereotype), followed by the belief that liars are nervous (28 per cent). A possible explanation for the existence of the belief in gaze aversion as a useful cue to deception across cultures can be found in another belief worldwide that avoiding eye contact is associated with shame (Fessler, 1999) and the fact that even non-human primates indicate submission by looking away (Argyle and Cook, 1976).¹³

Finally, it should be remembered in this context that when a police officer interviews a witness or a suspect, he/she has some kind of preconception as to this person's credibility. Furthermore, a naïve and credulous attitude towards a witness by police has been the cause of miscarriages of justice (see, for example, Wagenaar et al., 1993). Granhag and Strömwall (2000) investigated how observers' (125 undergraduates in Sweden) judgements of deceit or truthfulness were affected by different types of background information presented before they watched a videotaped testimony. They found that: (a) those observers who received crediting background information showed a pronounced truth-bias, whereas those who received discrediting information showed a small lie-bias; and (b) those observers who made truth-judgements used significantly more non-verbal than verbal cues than did those observers who made lie-judgements; and (c), contrary to what other researchers have reported, there was high inter-observer disagreement regarding how a large number of cues to deception are perceived and used. Granhag and Strömwall's findings indicate that studies of people's beliefs about cues to deception as well as their ability to detect deceit should also consider the important role played by one's preconceptions, the most common type of which is suspicion. Investigator bias by law-enforcement officers is well documented in the literature (Meissner and Kassin, 2002). One major concern, of course, is that a

police officer's misconceptions about what constitutes deceptive behaviour in a suspect may well be a starting point for a false confession and conviction of an innocent person.

Wrongful Beliefs about Cues to Deception

Incorrect beliefs by law-enforcement personnel about how liars behave are attributable to the fact that professional lie-detectors lack feedback about their deception-detection performance, learn from interrogation manuals regarding what cues to focus on and, finally, learn by observing their older and more experienced colleagues, thus perpetuating the same misconceptions (Granhag and Vrij, 2005). By contrast, prison inmates have been shown to be significantly better than chance in detecting deception because they are more open-minded about cues to deception and their experience being interviewed by police gives them feedback about their own effectiveness in lying and detecting lies (Hartwig et al., 2004). The same has been found with abused children living in an institutional environment¹⁴ (Bugent et al., as cited in Ekman, 2001). Let us next consider in some detail the reported importance of cues to deception, drawing especially on DePaulo et al. (2003), Vrij (2000, 2007), Granhag and Hartwig (2008a) and Granhag and Vrij (2005).¹⁵

Non-Verbal Cues to Deception

A number of different feelings may accompany deception, including detection apprehension and detection guilt. Some categories of individuals may well feel no guilt about having to lie to conceal their deceptive communication. Persons diagnosed with antisocial personality disorder (previously termed 'psychopathy') lack remorse and shame (Hare, 1970). Many diplomats are well-versed in the art of lying, as are hardened career criminals and spies. However, for many people, lying is stressful. Strong deception guilt undermines attempts at lying because it produces non-verbal leakage or some other clues to deception (Ekman and Friesen, 1972). To choose when to feel emotions and to control whether others become aware of them is a most uncommon skill possessed by only the most accomplished of actors. Ekman and O'Sullivan (1989:305–6) list the following conditions that increase detection apprehension: when the person to be lied to has a reputation for being difficult to deceive; is initially suspicious; when the deceiver has limited practice or no previous success, is particularly vulnerable to the fear of being caught out; is not particularly talented, possesses no special skill at lying and when the consequences of being found out are serious, or serious punishment awaits the deceiver upon being found lying; when the deceiver has not much incentive to confess because 'the punishment for the concealed act is so great'; and, finally, when the person being lied to gains no benefit from the deceiver's lie.

Non-verbal behaviours that can be used to identify liars comprise vocal and facial characteristics and movements.

Since the 1970s there has been a proliferation of empirical studies of non-verbal behaviour and there is one specialist journal dedicated to this field of study. Drawing on Vrij (2000:33), non-verbal behaviours comprise three categories:

- 1 *vocal characteristics*: speech hesitations, speech errors, pitch of voice, speech rate, latency period, frequency of pauses and pause duration
- 2 *facial characteristics*: gaze, smile and blinking
- 3 *movements*: self-manipulations, illustrators, hand and finger movements, leg and foot movements, head movements, trunk movements and shifting position.

According to Vrij (2000:24–28), liars may experience the following three different processes during deception, but this does not mean that the presence of any of these indicators necessarily indicates deception:

- 1 *The emotional approach*: deceit is associated with emotions such as excitement, fear and guilt that are different from those people experience when telling the truth (Ekman, 2001). Furthermore, such emotions generated by lying, in turn affect liars' behaviour. To illustrate, despite attempts by liars to hide it, fear can cause them to experience stress and physiological arousal, increases the pitch of their voice, their sweating, blushing, pauses and stutters in their speech, while feeling guilt over the crime will cause liars to avoid eye contact.
- 2 *The content complexity approach* maintains that lying can be a cognitive complex task because liars find it difficult to lie. This, in turn, will manifest itself in a number of cues to deception such as gaze aversion (Ekman, 2001) and fewer hand movements (Ekman and Friesen, 1972).

Of course, liars may well be aware of their emotions and their difficulty in lying and try to conceal both. Thus, the third approach is known as,

- 3 *The attempted behavioural control approach*: liars try to behave 'normally', to make an honest impression. In so doing, liars may well over-control their behaviour and tend to sound less vocally expressive, more passive and more uncertain (Granhag and Vrij, 2005:69).

As Vrij (2000:29) reminds his readers, 'The three approaches predict different and sometimes even contradictory behaviours during deception'. In considering behavioural cues to deception it should be noted that there is no published study documenting differences in such cues between ethnic groups (Vrij and Winkel, 1991)¹⁶ but there are differences in behavioural patterns (Matsumoto, 2006).¹⁷ Goffman (1959) emphasised self-presentation as a very important concept in understanding social behaviour. DePaulo (1992) defined 'self presentation' as regulating one's behaviour to make a positive impression on other people. A fourth approach to studying deceptive behaviour is the *self-presentation approach* (DePaulo et al., 2003), which emphasises that both liars and truth-tellers have the same goal – to do their best to appear honest; however, in doing so they will differ because liars' claims are illegitimate (DePaulo and Morris, 2004:17) and the knowledge of what they are trying to do will make liars appear more unpleasant and tense and, in

addition, will be able to provide less details concerning a crime, for example. In DePaulo and Morris' (2004) words, 'Compared to truth-tellers, liars may seem less forthcoming, and may tell their stories in less compelling ways' (p. 17). In other words, differences in how liars behave compared to truth-tellers in terms of their feelings, psychological processes and beliefs and strategies, provide us with valid cues to deception (p. 18). In considering conclusions to be drawn from the findings reported (see the meta-analysis by DePaulo et al., 2003), a major limitation of the existing literature is the small number of studies¹⁸ of suspects in real-life criminal investigations.

Spanish researchers have shown that the cognitive interview differentiates reliably between true and false statements intentionally made by witnesses to a crime.

An interesting new approach to detecting deception has been reported by two Spanish psychologists. Hernandez-Fernaud and Alonso-Quecuty (1995) carried out experimental work aimed at differentiating between true and false statements by eyewitnesses who watched a videotape of a simulated incident involving attempted car theft, threatening behaviour against the car owner and a witness. Subjects were interviewed using the traditional interview (TI) technique used by the Spanish police or the cognitive interview (CI) technique (Fisher and Geiselman, 1992) and found that: (a) witness accounts of events, persons and objects were more accurate in the CI condition (see chapter 3); (b) true statements contained more contextual information and more sensory details than the false ones; and (c) the CI produced greater differences between truthful and false accounts than the TI by amplifying the differences between the types of account. These findings indicate the CI is potentially very useful to those social workers and police interviewing crime victims/crime witnesses – it not only produces significantly more accurate witness accounts but it also appears to differentiate reliably between true and false statements made intentionally by witnesses to a crime.

Verbal Cues to Deception

Vrij (2000:104) mentions seven objective verbal characteristics, some of which are cues to deception, namely: negative statements, plausible answers, [unsolicited] irrelevant information, over-generalised statements (for example, 'never', 'everybody', etc.), self-references, direct answers and response length. As in the case of non-verbal behaviour, these seven verbal criteria are assumed to be influenced by emotions, content complexity and attempted control but, alas, again, there is no verbal behaviour that is typical of lying (p. 103).

3 PARADIGMS USED TO STUDY DECEPTION-DETECTION

A broad range of paradigms has been used by deception researchers to study the non-verbal and verbal leakage that normally occurs when people lie (see Miller and Stiff, 1993:39–49). These have included uninterrupted message presentations,

asking subjects to provide truthful and deceptive reactions to stimuli (known as ‘reaction assessment’) and implicating subjects in a cheating incident during an experimental task. The last paradigm is known as the ‘Exline procedure’ (Exline et al., 1970) which has the advantage of both producing deceptive behaviour not sanctioned by the experimenter and motivating deceivers not to get detected (Miller and Stiff, 1993:43). The most commonly used task in deception-detection research is to show subjects in laboratory studies video clips of people who have been instructed to lie about something or to tell the truth. The experimenter then calculates the number of correct judgements made in relation to the total number. In considering accuracy scores reported in this context, the reader should note the documented existence (see Granhag and Vrij, 2005:51) of a ‘veracity effect’ (that is, a ‘truth-bias’), a tendency by subjects to choose ‘The statement is true’ more frequently than ‘The statement is false’ (Levine et al., 1999).¹⁹ The truth-bias is very pronounced among lay persons. However, it is significantly less evident among prison inmates (Hartwig et al. 2004a) and police officers (Hartwig et al., 2004b); in other words, both police officers and prison inmates are suspicious of the answers people give to questions, the police officers due to their experience with having questioned large numbers of a biased sample of people and the inmates as a consequence of their own extensive experience deceiving others but, also, being lied to themselves (Granhag and Vrij, 2005:51). In considering findings reported, the reader should also note that, unlike in laboratory studies, researchers using real-life material face problems in terms of ‘ground truth’ (p. 51).

As already mentioned, until relatively recently psychological studies of deception have tended to use college students as subjects who lie or tell the truth about liking or not liking their friends and who are sometimes offered trivial incentives to take seriously what they are asked to do in experiments. Such mock studies are generally very low on external validity, a far cry from the real world of deception-detection in a law-enforcement context (Ekman and O’Sullivan, 1989). An additional limitation of laboratory studies is some people’s inability to be precise about which cues to deception have led them to decide that someone is lying. Studies of cues to deception vary in terms of: whether truth-tellers and liars are adults or children; whether subjects are lay persons or experts (by virtue of their professional experience) who are shown a video clip or experts who are shown a video clip and question a suspect face to face; or police officers who are shown videos of high-stake real-life interviews of suspects; or, finally, whether a study focuses on specific visible cues to deception or on *micro-expressions* that are normally not visible unless shown slowly frame by frame.

Regarding micro-expressions, Ekman (2001) provides adequate empirical evidence that observing and analysing such micro-expressions aids in deception because, generally speaking, such expressions (for example, one’s eyebrows being raised in response to fear and being lowered in response to anger) are involuntary and the great majority of people cannot convincingly fake an emotion other than the

one they are feeling. Vrij and Mann (2001) reported one such micro-expression (a suppressed smile) during a televised press conference by a man asking people to help find his missing girlfriend who he had in fact killed, as the police established later on. Researchers have found that females are better at recognising micro-momentary expressions that are correlated with lie-detection accuracy (Ekman and O'Sullivan, 1991; Frank and Ekman, 1997). One difficulty in evaluating the utility of micro-expressions as cues to deception-detection is that, despite Paul Ekman's significant

There is no verbal behaviour that is typical of lying.

work in this context, as Granhag and Vrij (2005:71) point out, unfortunately there is no published study in a peer reviewed journal of the frequency of emotional micro-expressions when people lie and tell the truth.

4 DECEPTION-DETECTION ACCURACY

On the basis of the DePaulo et al. (2003) meta-analysis of deception-detection studies, DePaulo and Morris (2004) concluded that: 'The existing research on deception detection should instill little faith that people are particularly good at this elusive skill. Although there are some ways in which liars behave differently from truth-tellers, there are no perfectly reliable cues to deception' (p. 38). A review of 37 studies by Vrij (2000) found that for lay persons (primarily university students) accuracy for detecting truths was 67 per cent and for detecting lies 44 per cent, with the overall accuracy rate being 57 per cent. We see that people are better at detecting truths partly due to the truth-bias and perform below chance as far as detecting deceptive behaviour is concerned.²⁰ What is perhaps equally interesting is the well-established finding (see below) that a broad range of professionals considered to be experts at questioning suspects and at lie-detection have an accuracy rate that is no better than ordinary members of the public, that is, at about chance level. A review of the relevant literature by Vrij and Mann (2003) found an overall accuracy reported rate of 55 per cent. Researchers have also found that: (a) it is not easier for adults to detect deception in children than in adults (see below); and (b) adults find it more difficult to detect deception in girls than in boys (Westcott et al., 1991). Vrij (2000:34–5) surveyed 45 studies of 7 vocal indicators of deception (hesitation, errors, high-pitched voice, speech rate, latency period, pauses duration, frequency of pauses) and 44 studies of 10 non-vocal indicators (gaze, smile, self-manipulations, illustrators, hand/finger movements, leg/foot movements, head movements, trunk, shifting position and eye-blinking). More recently, DePaulo et al. (2003) reported a comprehensive meta-analysis of the literature on cues to deception, covering 120 samples of participants (all adults), 158 verbal or non-verbal cues, and 1338 estimates of the link between the occurrence of a cue and the telling of a lie. Drawing mainly on the reviews by Vrij (2000), DePaulo and Morris' (2004) results from 120 samples and Granhag and Vrij (2005), the conclusions that can be drawn about cues to deception that distinguish liars from truth-tellers are provided next.

Cues that Distinguish Liars from Truth-Tellers

Studies of cues to deception have generally been more concerned with non-verbal rather than verbal cues to deception. Also, with the exception perhaps of Aldert Vrij and his co-workers in England, deception-detection researchers have used low-stake situations in laboratory studies. With these caveats in mind, drawing on a number of extensive literature reviews mentioned above and including the meta-analysis by DePaulo et al (2003) as well as DePaulo and Morris (2004) and Granhag and Vrij (2005), the existing empirical evidence suggests the following verbal and non-verbal characteristics apply when people lie and distinguish them from truth-tellers:

- they speak with a high-pitched voice, perhaps due to increased arousal, that can be detected with sophisticated equipment
- they make fewer illustrators (that is, hand and arm movements that accompany speech to ‘comment’ on what is being said), perhaps due to increased cognitive load
- their stories follow a logical chronological order
- they speak for longer
- their stories contain less detail, are less complete, less plausible and more ambivalent
- they are less engaging, less involved and are less forthcoming and cooperative
- they make more negative statements
- they complain more
- their faces are less pleasant and they are more likely to press their lips
- they sound less vocally expressive, are more passive and more uncertain
- a nervous liar will blink more (Harrigan and O’Connell, 1996)²¹ while a liar experiencing increased cognitive load will blink less (Wallbott and Scherer, 1991).²² Leal and Vrij (2008) have investigated whether eye blinks could discriminate between guilty and innocent examinees in a Guilty Knowledge Test (see below). In support of Wallbott and Scherer, they found that liars displayed fewer eye blinks during key items than during the control items because they experienced more cognitive load
- they make more false as opposed to felt smiles. The two kinds of smile produce slightly different facial muscle actions a skilled observer can be trained to discern (Ekman, 2001).

A high-pitched voice and making fewer illustrators have also been reported as significant indicators of deception in a recent meta-analysis by Sporer and Shwandt (2006, 2007). The same authors, however, caution against relying on the two cues to deception they have identified when assessing the truthfulness of what someone is saying. Finally, DePaulo et al. (2003), in their meta-analysis, identified pupil dilation as another significant cue to deception. It can be seen that, as Granhag and Vrij (2005:70) have pointed out, unlike the advice given in police manuals, the existing literature reviews reveal more verbal than non-verbal cues to deception. This is not

to suggest that one category of cues is more important than another. Stone (1991) is in no doubt about the futility of attempting to decide in the courtroom context whether someone is lying by observing their behaviour and on the basis of their apparent anxiety or calmness (pp. 827–8). He concluded that: ‘There is no sound basis for assessing credibility from demeanour’ (p. 829).

Detecting Deception in Children

Available research evidence shows that children at the age of four years can identify and tell lies (Bussey and Grimbeck, 2000) but some authors have reported that children at the age of two-and-a-half are capable of deceit (Chandler et al., 1989). However, when adults judge children’s deceptive behavior, they have a truth-bias and for this reason they are better at identifying truth-telling than lying in children (Westcott et al., 1991). Being able to make an accurate judgement about whether a child is lying in what he/she is communicating would be of great help to all those professionals who work with children – parents, nursery school and primary school teachers, social workers, lawyers and police. Without ignoring the importance of age differences for children (for example, 3 vs 7 years) as far as the use of deception strategies is concerned, the available empirical evidence shows that adults believe they can detect reliably when children are lying. The fact is, however, that the performance accuracy of adults in this context with children aged from 7–10 years is only slightly better than chance (59 per cent, reported by Westcott et al., 1991). Vrij and van Wijngaarden (1994) reported two experiments in schools in which students were shown videoclips depicting children (aged 5 and 6, or 8 and 9) giving either a true or a false report. Unlike earlier studies in this area, the children were completely visible, the false statement they made was their own decision (that is, they were not instructed to do so as in other studies) and the researchers also investigated the importance of children’s social skills in successfully making a false statement. In support of earlier research both experiments found that, despite subjects’ confidence, the accuracy rate was little better than chance – 57 per cent in one experiment and 58 per cent in the other against a chance level of 50 per cent. Vrij and van Wijngaarden also found that observers showed higher accuracy scores for younger than for older children. One possible explanation put forward for the observers’ apparent inability to accurately differentiate true from false statements by the children is that their student subjects had not been trained in detecting false statements by children and they speculated that nursery school teachers or child psychologists who have more experience in dealing with children might be more accurate.

Their prediction has, in fact, been borne out in a study by Chahal and Cassidy (1995), who examined how accurately social workers in the final year of their training, trainee primary school teachers and student controls could detect deception in male and female children in videotapes that focused on the child’s face in a close-up

but also showed the child's upper body in another shot by a different camera. It was found that no group of subjects showed overall superiority in accuracy scores, but those subjects who were parents did significantly better than non-parents. One policy implication of the latter finding is that in real-life situations calling for decisions to be made about a child's allegations, more recognition should be given to the decision maker having had real-life experience in dealing with children (p. 243). However, doubt has been cast on this suggestion by Leach et al. (2004), who compared the ability of police officers, customs officers and university students to differentiate between children who lied or told the truth about a transgression and concluded that adults have a limited ability to identify children's deception. Jackson (1996) investigated the ability of barristers and students to detect deception in 11–12-year-old children lying about having seen a film and found no differences in their disappointing deception-detection accuracy. However, the barristers showed a lower 'truth-bias' than the students. A more recent study of adults' ability to detect children's lies by Strömwall et al. (2006) reported lie-detection accuracy of 56.6 per cent for unprepared and 46.6 per cent for prepared lies. Finally, when Vrij et al. (2006) examined the ability of teachers, social workers, police officers and university students to detect truths and lies told by 5–6-year-olds they found that the accuracy score for all occupational groups was around 60 per cent, both for detecting truths and for detecting lies. Largely for ethical reasons that limit the kind of experiments one can carry out, the literature on adults' ability to identify lying in children can tell us very little about high-stake real-life interviews of sexually abused children in which someone may have suggested to a child to lie and what to say (Tate et al., 1992).

Like the adults who raise them, children lie, a small number of them also lie in interviews with social workers and/or police officers about, for example, having been sexually abused, often destroying the lives of those innocent adults they accuse at the suggestion, perhaps, of an adult. Sometimes, children also lie in court but do so more frequently than adults (Ceci and Friedman, 2000). Interestingly, interviewer-induced errors are not uncommon in child-abuse cases that are prosecuted (Davies, 2004:165). An expert may be asked to examine the evidence before the court, including records of interview and so forth. According to Davies (2004), a leading authority in forensic psychology in the UK who has also been a magistrate and testified in courts in different countries on children's evidence, 'the courts appear to appreciate the assistance of experts' (p. 160), but research is lacking regarding the impact of such expert testimony on the court's decision in real cases. Children, too, have a right to have their evidence heard, and have a right to a fair trial. Cognisant of the vulnerabilities of children (discussed in chapter 4) and of the possibility of false allegations, legal psychologists should continue to demand and themselves contribute with ecologically-valid research findings to 'rigorous but practical guidelines, systematic training of interviewers'²³ and proper maintenance of standards through regular audit, backed up by effective

advocacy in court' (Davies, 2004:166) – the best answer to problems with child testimony, both as eyewitnesses and as victims.

5 EXPERT LIE-DETECTORS: HOW ACCURATE?

The available empirical literature shows that humans, though generally successful in deceiving others more often than not, are generally poor lie-detectors if they rely on everyday experience alone because they have not acquired sufficient specialist knowledge about how to go about detecting lies (DePaulo et al., 1980; Kalbfleisch, 1985);²⁴ in fact, the average detection rate across 30 years of research is 57 per cent (Vrij, 2000). Even professionals supposedly trained to be good at detecting deception generally turn out to be no better than ordinary folk. On the basis of their meta-analysis, Bond and DePaulo (2006) reported an average accuracy rate for expert lie-detectors of 54 per cent. Such poor performance by presumed experts at lie-detection has been attributed partly to strong but wrongful beliefs by experts, as indeed by lay people, about cues to deceptive behaviour such as gaze-aversion (Strömwall et al., 2004). Colwell et al. (2006) have suggested that such erroneous beliefs can be corrected through training. Let us next consider some well-known studies of deception-detection accuracy by expert lie-detectors.

In an interesting field study, Kraut and Poe (1980) conducted mock customs inspections in which 110 volunteer subjects who were domestic passengers waiting for their departure from Hancock Airport in New York State and found that travellers were more likely to be searched if they were young and lower class, appeared nervous, hesitated before answering, gave short answers, avoided eye contact with the inspector, shifted their posture and were returning from holiday trips. In other words, the decision to search a traveller was based on their comportment. Interestingly, the researchers also found that customs inspectors were no better at detecting deceiving travellers than were members of the public.

One context in which deception by criminal offenders would be expected to occur frequently is the parole interview. Porter et al. (2000) used truthful and fabricated video clips depicting an account of a highly stressful personal experience with parole officers from the Correctional Service of Canada, who had a mean of approximately 12 years of job experience, and undergraduate students. The parole officers' degree of accuracy increased from their baseline of 40 per cent to 76 per cent as a function of the feedback/training provided; in other words, detecting deceptive behaviour is difficult but training can improve it.

In another interesting study, Ekman and O'Sullivan (1991) and Ekman et al., (1999) investigated the deception-detection accuracy of US Secret Service, CIA, FBI, and National Security agents, armed forces personnel, federal polygraph examiners, robbery investigators, sheriffs, judges, psychiatrists, college students and working adults. They reported: (a) no relationship was found between one's confidence and deceit detection accuracy; and (b) with the exception of the secret agents (whose accuracy was 64 per cent), there were no significant differences between the

members of the various law-enforcement agencies and the students. When occupational group was disregarded it was found that those who were accurate were more likely to use non-verbal or non-verbal plus speech clues to decide whether someone was lying than did inaccurate observers, who seemed to have relied on speech clues alone. Regarding explanations why members of the US Secret Service were better than the rest, Ekman and O'Sullivan allude to the fact that many of them had done protection work that involved guarding important government officials from potential attackers and such work may have predisposed them to pay more attention to non-verbal behaviour. Also, such agents would have had experience questioning people who threaten to harm government officials and tend to be truthful when answering questions. By contrast, criminal justice personnel would have had experience questioning people who would have good reason for lying, leading these law-enforcement personnel to form the view that most of the people they question are liars, resulting in over-prediction of deceit and low accuracy.

Vrij and Winkel (1993) in the Netherlands showed 80 male and 11 female detectives with an average of 17 years' experience in the Dutch police video fragments depicting subjects who had been instructed and given a monetary reward to lie about whether they were in possession of a pair of headphones. The detectives had 15 seconds to make their decision and to also indicate their degree of confidence in so doing. Given that 92 per cent of them indicated they had a lot of experience interviewing people, they were found, predictably, perhaps, to be very confident in their assessments and to agree significantly with each other about who was lying and who was telling the truth. Alas, the detectives' accuracy was less than chance (49 per cent) and, in fact, they turned out to be as inaccurate as subjects in other studies without any experience in questioning suspects. Vrij and Winkel reported that the detectives based their judgement on six criteria: less public self-consciousness, untidy dressing, less smiling, more social anxiety, less cooperative behaviour and more hand and arm movements during the communication the detectives deemed deceptive (p. 55). In other words, they were apparently judging on the basis of stereotypes. The crucial finding here is that erroneous preconceived notions about the nature of deceptive behaviour impairs the ability to detect deceit by non-professionals and professionals alike. Prison officers worldwide know it is very difficult to lie to an experienced recidivist prisoner who has had ample opportunity to sharpen his/her deception and deception-detection skills and, if not good at it, would soon know it. Prisoners have been found to have better knowledge about useful cues to deception than prison guards, police patrol officers, police detectives and customs officers (Vrij and Semin, 1996). In another similar study prisoners were found to hold less rigid beliefs about verbal and non-verbal cues to deception than did students and prison staff (Granhag et al., 2004). Holding less rigid beliefs about cues and a lie-bias goes a long way in explaining prisoners' higher deception-detection accuracy than law-enforcement personnel or lay persons.

Garrido et al. (1997)²⁵ reported a study in which police recruits and undergraduates in Spain were shown two video fragments and judged whether a videotaped female was lying or telling the truth. It was found that police: had more confidence in their lie-detection skills than the students; irrespective of their experience in the job, their accuracy in detecting deceptive statements was no better than chance; they were no better than the students in lie-detection; and, finally, the police were the least accurate in identifying truthful statements, showing a lie-bias. The ability of 52 British uniformed police officers to detect deception was examined in an experiment conducted by Vrij and Mann (2001). Their experiment differed from previous similar experiments because of its high-stake lie scenario. The police were exposed to videotaped press conferences of people who were asking the general public to assist in finding their relatives or the murderers of their relatives. They had all lied during these press conferences and had been found guilty of killing their own relatives. The accuracy performance of the police officers concerned was no better than chance and was not related to their degree of confidence, age, years of job experience in the police or level of experience in interviewing criminal suspects. Finally, policemen were better at detecting deception than policewomen.

Police officers using the 'indirect method' can distinguish truth and lies.

Very encouraging results have been reported by a team of British researchers at the University of Portsmouth. Vrij et al. (2001) had 39 police officers watch a videotape of a number of truth-tellers and liars being interviewed. In one condition the subjects were asked whether a person on the videotape was lying and in another (the 'indirect method') subjects had to indicate for each person they saw on the videotape whether that person 'had to think hard', thus focusing on the cognitive load shown to be experienced liars (Vrij et al., 2000). They found that: (a) when police officers were using the indirect method they could distinguish between truths and lies; and (b) only by using the indirect method did the subjects pay attention to the cues that were actual indicators of deceit. Vrij et al. concluded that the use of the indirect method to detect deceit has the potential to become a useful tool in lie-detection in legal contexts. Vrij et al.'s findings indicate that improvement in human lie-detection can be achieved by training people to pay attention to more valid cues to deception. However, some training cannot be expected to significantly change police officers' well-established beliefs in indicators of deception, as shown by Frank and Feeley (2003). They reported a meta-analysis of 11 studies involving training vs no-training comparisons and found a very small (4 per cent) overall effect in terms of deception-detection accuracy as a function of training.

Mann et al. (2004) asked police officers to detect deceit in segments of actual police interviews and to also indicate which cues to deception they had used to identify deceptive behaviour in a suspect. They found that police officers used non-verbal cues, namely, gaze and 'movements'. Using a different methodology, Hartwig et al. (2004b) gave police officers a brief case file and told them they were free to question the suspect. They reported that police officers relied equally on verbal (for example, details provided in answering questions) and non-verbal cues (for example, gaze

and movements). Recently, Granhag and Hartwig (2008b) have proposed a new theoretical perspective on deception-detection according to which psychologically informed mind reading can improve one's ability to detect deception. The term 'mind-reading' is used in an instrumental sense where the aim is not to read a person's mind but to predict his/her behaviour; more specifically, the goal is to mind-read suspects' strategies that can then be utilised to predict their future behaviour. This approach enables criminal investigators to plan and carry out their questioning of suspects in a strategic manner. Their theoretical perspective encompasses knowledge from the psychology of mind-reading, self-regulation, guilt and innocence. Available evidence from laboratory work carried out at Göteborg University in Sweden with guilty and innocent mock suspects (Hartwig et al., 2007) shows that they use different strategies. This finding is supported further by DePaulo et al. (2003), who found in her extensive meta-analysis that, in contrast to liars, truth-tellers are perceived as cooperative and forthcoming. Hartwig et al. also maintain on the basis of their study that a suspect's strategy reflects his/her mental state and a suspect's behaviour reflects his/her strategy.

Regarding the policy implication of the mind-reading approach to deception-detection advocated by Granhag and his co-workers in terms of how an investigator should interview a suspect, a technique known as 'The Strategic Use of Evidence' (SUE technique) has been developed and tested with police trainees (see Hartwig, 2005;²⁶ Granhag et al., 2007; Granhag and Hartwig, 2008b). The SUE technique consists of three components: (a) do not disclose incriminating evidence; (b) ask the suspect for free recall; and (c) ask specific questions concerning the incriminating evidence without disclosing it. In a training study Hartwig et al. (2006) trained half of their participating police trainees by informing them about the psychology of guilt and innocence and what suspect strategies have been reported by researchers, by instructing them how to identify potentially incriminating information in case files and how to plan and ask questions about the incriminating evidence without disclosing it to the suspect. Hartwig et al. found that when the trained interviewers applied the SUE technique what guilty suspects said was contradicted by the evidence (p. 196). Trained interviewers were able to detect deception with 85 per cent accuracy compared to 56 per cent accuracy by the untrained interviewers. Finally, guilty suspects interviewed using the SUE technique reported experiencing more cognitive demand during the interview compared to the innocent suspects also interviewed with the SUE technique. The findings reported by the Swedish researchers using the SUE technique are very interesting and need to be replicated.

In conclusion, it is comforting to note that in recent years great consensus has been reached about a small number of useful cues to deception-detection, largely as a result of a number of literature reviews and greater use of real-life situations, including high-stake ones high on ecological validity. Significant progress has been made in deception-detection techniques that can be taught to law-enforcement personnel, thereby increasing their accuracy rate significantly.

Human Super Lie-Detectors

O'Sullivan and Ekman (2004) describe the characteristics of a group of 29 super lie-detectors they have been able to identify from the numerous people of diverse backgrounds who have attended their lie-detecting training seminars over the years. They have used three measures of lie-detection in order to select them: *Emotion Deception Judgement Task* (Ekman and Friesen, 1974; Ekman et al., 1988); *Opinion Deception Judgement Task* (Frank and Ekman, 1997) and the *Crime Deception Judgment Task* (Frank and Ekman, 1997). Ekman and his co-workers have thus identified 14 'ultimate' lie-detection experts who had obtained 80 per cent or more on the basis of the three criteria mentioned and 15 penultimate lie-detection experts who had scored 90 per cent or more on the opinion test and 80 per cent or more on the other two tests.

As with many examples of individuals who perform incredible feats many of us would love to emulate, the best one can conclude is that wizard lie-catchers are idiosyncratic.

On the basis of their quantitative and interview data from their 'Wizard Project', O'Sullivan and Ekman (2004) reported that the 29 wizards of lie-detection using behavioural cues have the following characteristics: they are predominantly male; with one exception, are aged 40–60 years; utilise both verbal and non-verbal cues to deception; show 'an exquisite sensitivity to the nuances of language use' (p. 81); have had unusual childhoods; are extremely responsible and/or conscientious; are quiet, reserved and observant; are able to understand others and to act the role or the behaviour required in a particular situation; have academic degrees; observe and describe people in a more complex way and more thoroughly; 'show a nuanced understanding of social, racial, and individual differences'; have had familiarity with a great diversity of people; do not as a group hold particular political or religious beliefs; have hobbies or occupations that have sharpened their acute sensitivity to non-verbal cues or that became their hobbies because of their very talent in that area. It becomes clear one cannot be trained to become a lie-detection wizard. The group of super lie-detectors studied by Ekman and his co-workers possess skills and interests that have been developed since childhood to make them the 1 per cent of professionals who use cues to deception very effectively in the course of their work. As with many examples of individuals who perform incredible feats many of us would love to emulate, the best one can conclude is that wizard lie-catchers are idiosyncratic. One suspects that, like chess grandmasters, wizard lie-catchers cannot themselves, introspecting and thinking aloud, provide an adequate account of the thinking processes that underpin their gift.

Expert Advice on How to Detect Lies

The well-known deception-detection expert Aldert Vrij (2008:395–417) in the recent second edition of his book *Detecting Lies and Deceit* provides nine guidelines to catch liars by examining their verbal and non-verbal behaviour and eight

guidelines on how to best conduct an interview in order to detect deception. His guidelines concerning cues are: use flexible decision rules that include multiple cues; consider alternative explanations when interpreting emotion, cognitive overload and attempted control cues; without showing it, be suspicious; do not rush into deciding that someone is lying; focus on those behavioural cues that are known to give away liars; verbal and non-verbal cues should be considered at the same time; and establish a baseline honest response in a similar situation to be able to identify deviations from it under questioning.

Lying Without Getting Caught

Spies are among those professionals who are expected to be effective liars in high-stake situations, including hostile interrogations. Ferguson (2004:62–69), in his book *Spy* of the well-known BBC TV series, lists the following advice to secret agents about how to conceal their lies if questioned: the lie must be kept simple and be plausible; maintain an even tone of voice; visualise what the lie is describing and talk about the picture; avoid hesitation words; lean forward towards the questioner; do not touch mouth or face or hide mouth behind hands and don't fold arms; use long looks while telling a lie but glance away occasionally; control breathing using slow and deep breaths; if possible, prepare for the questioning and, if not, think what questions are likely to be asked; and, finally, remain detached remembering you are innocent and falsely accused. Ferguson (2004) goes on to add that lying can be improved with practice and provides examples of how to deflect difficult questions. However, as secret agents are also aware, in addition to behavioural cues to deception, an interrogator can utilise both technology and specialist questioning methods.

The literature from a number of countries on both sides of the Atlantic indicates that people's (including law-enforcement personnel) inability to detect deceit at a level better than would be expected by chance is attributable to their erroneous stereotyped beliefs about cues to deceptive communication. However, police officers' deception-detection accuracy is significantly higher in ecologically valid studies using videotapes of real-crime suspects being questioned by police in high-stake cases. Also, there is evidence that, while detecting deceit is undoubtedly very difficult, training and feedback can enhance detection skills (Porter et al., 2000). The use of the indirect method demonstrated by Vrij et al. (2001) appears very promising and warrants further testing in the field. Finally, studies of behavioural cues to deception should take into account the physical attractiveness, in terms of facial appearance, of the subjects to be judged as truth-tellers or liars. It has been reported that people who are judged to be 'attractive' are also considered to have an honest facial appearance, that is, are judged as less likely to lie (Bond et al., 1994; Bull and Vine, 2003).²⁷ This finding is not surprising in view of the well-documented stereotype that attractive-looking people do nice things (Memon et al., 2003).

6 COMPUTERISED LIE-DETECTION

What would make the life of all those tasked with questioning suspects much easier would be the existence of a computer program with a high enough lie-detection accuracy. Let us next consider two such programs. Gregg (2006) reported results from testing a new computer-based lie-detection technique he calls the ‘timed antagonistic response alethiometer’ (TARA). *Alethiometer* comes from Greek and means a measuring device (meter) for truth (alethia/ ἀλήθεια). TARA manufactures a situation in which if they lie, respondents can perform two incompatible tasks, but if they tell the truth they can perform two compatible tasks. The two incompatible tasks take longer to do correctly and the longer response is indicative of dishonesty. Gregg reported that, using TARA, he could distinguish liars and truth-tellers with about 85 per cent accuracy – very much the same as with a polygraph examination (see below). A team of researchers (Rothwell et al., 2006) from Manchester Metropolitan University in England have reported a 75 per cent accuracy in identifying non-verbal facial cues to deception using a computerised program known as ‘Silent Talker’ in individual responses. Silent Talker uses Artificial Neural Networks. The results obtained by both Gregg (2006) and Rothwell et al. (2006) are interesting and should be replicated in the field in high-stake situations with the additional aim of improving accuracy.

7 PHYSIOLOGICAL AND NEUROLOGICAL CORRELATES OF DECEPTION

The Psychological Stress Evaluator/Voice Stress Analysis, Layered Voice Analysis

A person who is lying tends to have a higher-pitched voice than a truth-teller because of stress. Such differences are usually very small (only a few hertz) and can only be detected with sophisticated equipment. Mention has already been made that: (a) people believe deception is associated with an increase in speech disturbances (Akehurst et al., 1996); and (b) there is empirical evidence, though not unequivocal, that liars make more speech hesitations and speech errors (compared to truth-tellers) when the lie is cognitively difficult and, also, make fewer speech hesitations (compared to truth-tellers) when the lie is easy (Vrij and Heaven, 1999). We have also seen that changes in voice pitch have been reported as a correlate of deceptive communication. Voice stress analysis (VSA), also known as psychological stress evaluator (PSE), is a commercially available instrument that its advocates claim detects and records low frequency stress changes in the voice (Horvath, 1979). Neglecting verbal content, VSA measures the stress changes that result in micro-tremors in the vocal muscles, which can be picked up by a microphone and accurately measured. The voice sample is recorded and played back at reduced speed to the PSE, which plots a graph of the speech (Brenner et al., 1979). One obvious

advantage of the PSE over the polygraph (see below) is that (if we accept what its supporters claim) it can be used to detect lying without the person physically being there or being hooked up to any machine. Thus, it could be used while someone is speaking on the phone, or it could be used to examine a tape-recorded or video-recorded message and, furthermore, it can be used to analyse sentences and statements, not just ‘yes’ and ‘no’ responses. Today, a number of companies offer, for a fee, to analyse with advanced computerised technology specimens of someone’s voice and to infer whether the person is lying. These potential uses sound very impressive but what do we know about its accuracy in identifying lying? Methodologically speaking, as Vrij (2007:94) points out, in order to reliably assess whether someone is lying via the telephone, one should ask relevant and irrelevant questions, as used by polygraph examiners (see below) and compare the voice pitch measurements. In addition, the examiner should subtly guide the examinee to lie to control questions. However, such a procedure would not be possible and, as discussed below, the relevant-irrelevant test by polygraphers has been criticised.

The accuracy of the PSE was reported as no better than chance by Brenner et al. (1979), Horvath (1979) and Hollien et al. (1983). The research mentioned can be said to be limited due to low external validity but, according to Podlesny and Raskin (1977), negative findings about the PSE were reported by researchers utilising a mock-crime situation and a sample of criminal subjects. Very serious criticisms have been levelled against VSA. Citing Shipp and Izdebski (1981), Granhag and Hartwig (2008a) remind their readers that there is limited scientific evidence for the existence of tremors in the muscles that produce speech and, consequently, there is no tremor to measure in the voice (p. 143). Furthermore, even if such tremor in the voice existed, one would need to show scientifically that differences in the tremor distinguish reliably between liars and truth-tellers. In view of serious flaws in VSA, it is not surprising that the National Research Council (2003) in the United States concluded that: ‘although proponents of VSA claim high levels of accuracy, empirical research on the validity of the technique has been far from encouraging’. A more recent method than VSA is layered voice analysis (LVA). It utilises advanced technology and computer analysis of digitalised sounds that are difficult to be picked up by the human ear to yield a ‘truth value’. However, according to Granhag and Hartwig (2008a:144), serious doubt has been cast on LVA by forensic phoneticians. Finally, the reader should note in this context that the possibility of law-enforcement agencies using the VSA or LVA without a court warrant raises serious ethical questions about its use.

The Polygraph/Lie-detector

As most people know, anxiety is normally accompanied by physiological changes – sweating, dryness of the mouth, the heart beating faster. The belief that most people feel anxious when lying and this, in turn, is betrayed by measurable physiological

changes, is as old as human existence itself, is widely held today and forms the basis of the polygraph lie-detection method. Noticing that when a person is anxious or afraid they do not salivate resulting in mouth dryness, the ancient Hindus would give a suspect rice to chew and spit it out. Failure to do so was taken as evidence of guilt (Harnon, 1982:341).²⁸ The assumption that when people lie is evidenced in physiological changes which they do not control underpins the polygraph test for detecting deceit. The idea that changes in blood pressure and pulse accompany lying was first put forward by the pioneer Italian criminologist, Cesare Lombroso, in the nineteenth century (see Palmiotto, 1983). The polygraph itself has been available for about 80 years now. It was in use a number of years before the publication of Larson's (1932) *Lying and its Detection: A Study of Deception and Deception Tests*. In the United States where the polygraph has been developed and is used the most, it is in use by federal and state law-enforcement agencies, the private sector, private citizens, lawyers in civil litigation and, finally, in post-conviction assessment.²⁹ According to Bartol and Bartol (2004a:83), the greatest use of polygraph tests is made by the counter-intelligence services of the United States. Regarding the use of the term 'lie-detector', the reader should note that the machine records a person's psychophysiological changes in response to emotion and stress and the polygraph examiner infers deception by analysing and scoring the chart or graph produced. In fact, nowadays the scoring and the inference is automatically done by a computer (see below), yielding a probability statement about the likelihood that a person was truthful in his/her response to a particular question.

Expert evidence on the polygraph

Regarding the admissibility of expert evidence on the polygraph, according to Freckelton and Selby (2005:149–50), there has been no reported judgement on the use of the polygraph by a superior court in England but the Privy Council on appeal from Jamaica in *Bernal v. The Queen* [1997] VKPC 18 held that a judge had been correct in excluding polygraph evidence. In the United States the preponderance of authority³⁰ is against the admission of polygraph evidence (Freckelton and Selby, 2005:150). In Canada, in *R v. Beland* ((1987) 4 DLR (4th) 641 at 655) the majority of the court rejected admission of polygraph testimony on the grounds that it ran counter to well-established rules of evidence and its admission would serve no purpose that was not already served. In Australia, the New South Wales District Court in *R v. Murray* (1982) 7 A.Crim.R 48), admission of expert evidence on behalf of an accused person was rejected on the basis of the common knowledge rule (see chapter 7). The major decision, however, on the admissibility of polygraph tests is that in *Mallard v. The Queen* (2003) 28 WAR 1; [2003] WASCA 296 by the Court of Criminal Appeal of the Western Australian Supreme Court, which, according to Freckelton and Selby (2005), 'is likely to result in polygraphy evidence being rejected in Australian courts for the foreseeable future' (p. 153). Freckelton and Selby conclude that it is likely courts in Australia and New Zealand will follow the sound reasoning in the Canadian case of *R v. Beland* as to the admissibility

of expert evidence based on polygraphy (p. 159). The lack of consensus within the scientific community, one of the *Daubert* criteria, was the main reason the US Supreme Court decision in *U.S. v. Schefer*³¹ furnishes support to courts wishing not to allow the introduction of polygraph evidence.

The polygraph basically measures changes in: (a) blood pressure; (b) electrodermal activity (that is, the galvanic skin reflex (GSR)); and (c) respiration. The polygraph has been traditionally used in criminal investigation, employment screening and for security screening (Office of Technology Assessment, 1983). The GSR refers to the electrical resistance of one's skin, especially that on the palm or other hairless surfaces. The GSR varies with the activity of the sweat glands and is a convenient measure of sympathetic activity. All polygraph examinations begin with a pre-test interview (Raskin and Honts, 2002). Use of the polygraph in the United States is provided in the *Employee Polygraph Protection Act* (1988). The polygraph is not used in a number of countries such as Australia, the Netherlands, the UK (except by the security service; see Russell, 1986), Germany and France, but it is used in a number of countries in addition to the United States, namely, Turkey, Israel, Canada, South Korea, the Philippines, Taiwan, Thailand, Japan (Barland, 1988), Poland (Wojcikiewicz, 2001), Mexico and Pakistan (Memon et al., 2003:21). In the United States, where the federal government's Department of Defence Polygraph Institute trains 100 new federal examiners each year, and where such evidence is admissible in court in 32 of the 50 states (see Honts and Perry, 1992), the polygraph is widely used by law-enforcement agencies as an investigative tool to verify witness statements, to clear suspects and to provide leads for interrogations (Honts and Perry, 1992). The polygraph can also be used by criminal suspects wishing to convince the police of their innocence, as did Russell Jewell who was arrested for the bomb explosion in Centennial Park in Atlanta during the 1996 Olympic Games (cited by Vrij, 2000:169). Mock jurors are not overwhelmed by polygraph evidence against a defendant (Myers and Arbuthnot, 1997). Its wide use in some countries should not, however, blind us to the controversy surrounding its reliability as a method of detecting deception as well as a number of ethical concerns about its use.

Scoring the polygraph chart

There are three approaches to scoring the polygraph chart (Raskin, 1989b), namely, *global evaluation*, *numerical evaluation*, and *computer scoring* (see Kircher and Raskin, 1988).

The use of computer-based methods to score polygraph charts (known as computerised polygraph systems (CPS) that in recent years have replaced the conventional chart polygraph method) has been criticised by Furedy (1996). Given the lack of clarity in how to score polygraph charts (that is, whether the difference between a control and relevant question is 'noticeable' or 'strong' or 'dramatic'), Vrij (2000) has argued that scoring polygraph charts is indeed a subjective process (pp. 184–6).

Deception-detection with the polygraph: techniques used

The relevant–irrelevant question test was used in the early days of the polygraph and is nowadays used in pre-employment screening. A person who is lying is expected to show stronger reactions to the relevant questions. The simple fact that an innocent person who is anxious about the outcome of the questioning would be labelled as a liar means that it is a technique that produces an unacceptable number of false positive identifications.

To overcome limitations of the relevant–irrelevant test researchers developed the control question test (CQT),³² also known as the comparison question test.³³ This technique is commonly used in criminal investigations and involves asking three types of questions: (a) relevant, ‘hot’, questions (for example, ‘Did you drive the getaway car used in the robbery?’); (b) irrelevant, ‘cold’, questions (for example, ‘Is your full name John Simon Smith?’); and (c) control questions (for example, ‘During the first twenty years of your life, did you ever take something that did not belong to you?’ (Raskin, 1989b:257)), which ‘are designed to give an innocent suspect an opportunity to become more concerned about questions other than the relevant questions, thereby causing the innocent suspect to react more strongly to the control than to the relevant questions’ (p. 253). The idea is that a guilty subject will react more strongly to the relevant questions, whereas an innocent subject will react more strongly to the control questions. The polygraph examiner compares a suspect’s responses to the relevant and control questions and decides whether they indicate truthfulness or lying.³⁴ Strong supporters of the polygraph, such as Raskin (1989b), cite laboratory studies reporting polygraph examination accuracy of between 93 per cent and 97 per cent and a relatively high rate (30–80 per cent) of confessions by criminal suspects questioned by law-enforcement personnel using this technique. The Office of Technology Assessment (1983) reported that acceptable field studies examined pointed to a 90 per cent and 80 per cent overall accuracy of the polygraph on criterion-guilty and criterion-innocent suspects respectively. In other words, at best, a polygraph examination risks labelling 20 per cent of suspects as liars who are later found to be innocent.

Raskin (1989b) reported a major field study that used data from criminal investigations conducted by the US Secret Service over a three-year period beginning in 1983. Polygraph examinations were only included in the sample if they involved: (a) a confession that inculpated or exculpated a suspect; and (b) if there was corroboration of the confession by physical evidence. The polygraphed suspects were thus ‘classified as either confirmed truthful or confirmed deceptive on one or more relevant questions in the test’ (p. 267). Different secret service polygraph examiners re-evaluated the polygraph charts blindly. It was found that the original examiners had a false negative rate of 5 per cent and a false positive rate of 4 per cent. The blind re-evaluations were found to have a 6 per cent false negative and 15 per cent false positive rate. The difference in the false positive rate was attributable to the fact that the original examiners were in a position to make judgements about deception by utilising information about the case concerned and about the demeanour of

the suspect, information that was not available to the blind examiners. Raskin concluded that: 'Taken as a whole, these data provide strong support for the accuracy of control question polygraph tests when properly used in criminal investigations' (pp. 268–9).

However, caution is warranted in accepting Raskin's conclusion because: (a) a confession by a person as a result of having been given a polygraph test by an agent of the secret service is not a satisfactory criterion due to the likelihood that the suggestibility factor operated in a number of cases; (b) guilt had not been established beyond reasonable doubt by a properly constituted court of law; and, finally, (c) the vast majority of polygraph examiners do not possess the qualifications, do not receive the in-depth training and do not have the practical experience that apparently characterise secret service agents and explains their relative success at detecting deceit with and without the aid of the polygraph (Ekman and O'Sullivan, 1991). Raskin's field study is, nevertheless, a significant improvement on earlier attempts to test the effectiveness of the control question technique. Raskin (1989b) himself concedes: 'It is clear that the major weakness of the traditional control question test is its susceptibility to false positive errors'. Given that such mistakes by secret service agents may well be used by them to justify keeping a citizen under surveillance and so forth, false positive polygraph tests are a cause for concern.

Persons diagnosed as psychopaths (in contemporary clinical diagnosis the preferred term is 'suffering from an anti-social personality disorder') are known to have a propensity to lie, not to experience anxiety and to feel no remorse. Parrick and Iacono (1989) offered prison inmates \$20 to beat the polygraph and found that the psychopaths had no advantage on the polygraph test. The accuracy of the control question technique with both psychopathic and non-psychopathic groups of inmates was slightly better than chance for the innocent (55 per cent) and 86 per cent for the guilty. In other words, using the control question technique polygraph examiners wrongly classified 45 per cent of the innocent subjects as guilty of the theft.

In another field study Parrick and Iacono (1991) collaborated with the polygraph division of the Royal Canadian Mounted Police (RCMP). Using information in police investigative files they identified persons who had taken a polygraph test but were subsequently shown to be innocent of a crime. The researchers had RCMP polygraph examiners score those persons' polygraph charts blindly and found that 55 per cent of them were classified as truthful. It was also reported that the RCMP conducts polygraph tests when the investigation fails to unearth evidence incriminating a suspect. The two studies by Parrick and Iacono leave no doubt that the control question technique misidentifies almost half of innocent suspects as liars.

More recent reviews of evaluation studies of the accuracy of the CQT (Honts, 2004; National Research Council, 2003) led to the conclusion that: 'Although it is difficult to provide an exact figure, field and laboratory studies indicate that the CQT has some discriminative value' (Granhag and Hartwig, 2008a:147). However,

the conclusion of a review of the validity of CQT by Fielder et al. (2002)³⁵ in Germany led a German Supreme Court to abandon the test (Granhag and Hartwig, 2008a:147). The CQT is the most frequently used method for investigative interrogations in the United States (Ben-Shakhar, 2002). Regarding the extent to which CQT satisfies the five *Daubert* criteria,³⁶ Vrij (2007:90–91), *inter alia*, concludes that: (a) it is problematic whether the scientific hypothesis is testable in the field; (b) it has a very high error rate in field studies; and, finally, (c) the theory on which the hypothesis and/or the technique is based is not generally accepted in the appropriate scientific community, whether one considers laboratory or field studies.

To overcome weaknesses of the control question technique the directed lie control test (DLT) has been suggested (Honts and Raskin, 1988). A typical DLT question might be ‘Before the age of eighteen did you ever lie to anyone about anything?’ and a suspect is instructed to answer ‘no’ to each such question and is also told by the polygraph examiner that to deny ever having lied in the past means that he/she is lying. The assumption is that, in contrast to a guilty person, A field study by Honts and Raskin (1988) examined the validity of the directed lie test. Honts and Raskin carried out polygraph tests of criminal suspects over a four-year period and obtained 25 confirmed tests in which one personal directed lie was included with traditional control questions. Each of the polygraph examiners then scored blindly the charts obtained by the other examiners, including or not including the directed lie question. Honts and Raskin reported that including one directed lie question completely eliminated false positives. Raskin (1989b) concluded that the findings from experimental simulation and field studies support the view that the directed lie test has a number of advantages over the traditional control question test, namely, that: it is more standardised in its structure; it is easier to administer; it requires less manipulation of the subject and creates fewer problems for the subject; it is more readily explained to lawyers, judges and juries; and, most important, it reduces the problem of false positives inherent in the traditional control question test (pp. 274–5). It would be true to say, however, that the accuracy of DLT has not been tested by a sufficient number of studies (Raskin and Honts, 2002). Consequently, the validity of the assumption about innocent and guilty suspects remains to be adequately empirically demonstrated. Finally, the reader should note in this context that in essence a control question test is misleading the suspect and is, thus, unethical and illegal (Vrij, 2000:186–7).

The polygraph and ascertaining a suspect has direct knowledge of specific information

An early method used to investigate whether a suspect has direct knowledge of particular items of information was the peak of tension test. This involves comparing a suspect’s physiological responses to a number of alternative answers (usually five) to a particular question, such as the type of knife used to stab a victim to death. One of the alternative answers is the correct one. What is known as the searching peak of tension test can be used to establish a fact that a criminal investigator does

not know but is keen to find out, such as where a body is buried or a kidnap victim is kept (Raskin, 1989b:276).

Building on the peak of tension test, Lykken (1959) proposed the guilty knowledge test (GKT), an alternative to the CQT. This basically tests a suspect's reactions to specific items of information in the form of multiple choice questions, directly relevant to the commission of a crime of the kind that only the perpetrator would know. According to Podlesny and Raskin (1978) and Iacono et al. (1987), the galvanic skin response is the most useful measure in determining the outcome of a concealed knowledge test. One major limitation of the GKT is that the number of real-life serious crimes in which it can be used is limited (Vrij, 2000:190–1) because: (a) the only questions that can be asked are those to which only the polygraph examiner and the suspect know the answers; (b) the suspect may be found to have guilty knowledge but is innocent (for example, in a sexual assault case the suspect is found to have had sexual intercourse with the alleged victim but denies it was not without her consent); and (c) the polygraph examiner can only ask questions the answers to which would not be known to an innocent examinee. However, the frequent practice of the mass media to report intimate details of serious crimes limits the questions that can be asked of a suspect. Interestingly, however, Elaad and Ben-Shakhar's (1997) experimental concealed knowledge technique (CKT) study found that merely asking the same question more than once achieves the same accuracy rate as that achieved by asking several questions. Were it to be replicated, that finding would add significantly to the effectiveness and efficiency of the CKT. It should be noted in this context that the term 'guilty knowledge technique' has been replaced by 'concealed knowledge technique' (CKT) because the latter is more defensible as someone can conceal knowledge but feel no guilt about it.

Based on their assessment of laboratory studies,³⁷ Vrij (2000) and MacClaren (2001) reported that the GKT correctly identified 96 per cent and 83 per cent of innocent subjects and 82 per cent and 76 per cent of the guilty ones respectively. One criticism of the GKT by Granhag and Hartwig (2008a:148) is that for the test to be used, innocent suspects must not know the alternatives. However, this cannot always be certain because of the mass media and, also, that the guilty suspect must know the answer to questions about the crime scene. As Granhag and Hartwig point out, if the suspect failed to notice a particular detail at the scene of the crime and thus has no knowledge about it, he/she will give innocent responses under polygraph questioning. The applicability of GKT to real criminal cases has been estimated to be 10 per cent of FBI cases (Podlesny, 1993).³⁸ In conclusion, the empirical evidence mentioned shows that the CKT can be a useful tool in criminal investigations and that it protects innocent suspects from being falsely classified as guilty. Regarding the extent to which CKT satisfies the five *Daubert* criteria,³⁹ Vrij's (2007:92) evaluation of the technique concludes, *inter alia*, that: (a) laboratory studies satisfy all five criteria; (b) it is problematic whether its scientific hypothesis is testable in the field and, consequently, it has been

The concealed knowledge technique can be a useful tool in criminal investigation and it protects innocent people from being falsely identified as guilty.

tested only in a few field studies; (c) field studies show a very high error rate; and, finally, (d) CKT polygraph examinations are generally accepted within the relevant scientific community. However, the accuracy of CKT does not justify it as evidence in court.

Factors impacting on polygraph test accuracy and outcome

A number of factors can justifiably be said to influence lie-detection using the polygraph. Who the examiner is has been shown to be an important factor. Elaad and Kleiner (1990) reported an interesting field study that compared one group of examiners ($N = 5$) with at least three years' experience in chart interpretation and a second group ($N = 5$) of trainees in the seventh and eighth month of a 10-month training program. A random sample of 50 real-life polygraph records from the Israel Scientific Interrogation Unit were used to examine the performance of the two groups of examiners. Half the records were of innocent suspects verified by the confession of another person and the other half were of guilty suspects verified by their own confession. It was found that an examiner's length of experience correlated positively with accuracy detection rate when scoring the respiration channel but not when scoring the skin resistance or blood pressure channels.

That the polygraph can be fooled by an accomplished liar is not in doubt. The CIA agent Aldrich Ames, who spied for the Soviets, passed numerous polygraph tests.⁴⁰ As far as the personality of the suspect is concerned, there is some evidence that emotional stability, also known as trait anxiety, can impact on the polygraph's accuracy (Gudjonsson, 1992a:186). More specifically: 'stable subjects may react in a way that leads the examiner to make false negative errors, whereas emotionally labile subjects more commonly react in a way that results in false positive errors' (p. 186). The personality trait of psychopathy (better known today as anti-social personality disorder) has been reported by a number of studies as a correlate of criminal behaviour and is of interest to many forensic psychologists working in prisons (see Blackburn, 2000; Hare, 1996). The potential of countermeasures to influence a polygraph test outcome has attracted a certain amount of research interest.⁴¹ In brief, the available evidence shows that it is possible, using countermeasures (for example, of the kind that augment the examinee's response to the control questions) to seriously undermine the accuracy of the polygraph (Gudjonsson, 1992a:187). For one to use such countermeasures effectively, however, special training is required (p. 187). Apparently, an easy and effective countermeasure (see Honts and Amato, 2002, for a review) that can be used by guilty suspects against a control question polygraph test is to serially subtract 7 from a number greater than 200 (Honts et al., 1994) or to bite one's tongue or push one's toes into the floor. Anybody wishing to attempt to beat the polygraph should remember that examiners themselves get schooled in counter-countermeasures (Gudjonsson, 1988:133–4). Available evidence shows that if a person is trained in mental countermeasure techniques, he/she can defeat the polygraph under both the CQT and

the GKT (Ben-Shakhar and Dolev, 1996; Honts et al., 1996; Honts and Amato, 2002). However, there have been no field studies published on the question of how effective different countermeasures and counter-countermeasures are (Gudjonsson, 1988:134). Any such research would have been carried out by the Department of Defense Polygraph Institute, which, like its counterpart in Israel, treats such research as classified. One notable exception is the article published in *Polygraph* in 1998 on the accuracy of the test for espionage and sabotage by the aforementioned Institute (see below).

From the point of view of the general public, an easy countermeasure to its use would seem to be to take some drugs that will interfere with a polygraph test. Raskin (1989b) concluded his discussion of laboratory studies of the potential effects of such drugs as tranquillisers, beta blockers, stimulants and alcohol (see Iacono et al., 1987; O'Toole, 1988; Waid et al., 1981) by stating that there is no convincing evidence for such effects either with the control question or the GKT procedure (p. 285). Support for this view was later provided by Iacono et al.'s (1992) laboratory study finding that anti-anxiety drugs are not effective countermeasures to be used against the GKT. Countermeasures would seem to take on another interesting twist in the light of attempts by some researchers in recent years to infer the possession of information in persons attempting to conceal it measuring 'event-related brain potentials' (see Bashore and Rapp, 1993). According to Vrij (2000:204–5), the small number of studies does not allow conclusions to be drawn about the ability of the polygraph to detect lies told by psychopaths who are less anxious than non-psychopaths and tend not to feel remorse and, consequently, do not become aroused when telling lies. The possibility of defeating the polygraph using some countermeasures has encouraged the development of an antipolygraph industry in the United States, which includes training people in such countermeasures for a fee in order to pass a polygraph examination.

A number of bodies have carried out assessments of the polygraph and have published reports (Irving and Hilgendorf, 1980; Office of Technology Assessment, 1983; Department of Defense, 1984; House of Commons Employment Committee, 1985; British Psychological Society [BPS] Working Group, 1986, 2004; National Research Council, 2003). The Royal Commission on Criminal Procedure in Britain devoted nine lines to the polygraph in its report and rejected the idea of polygraph evidence in the courts, but did not deny its value as an investigative tool for police forces. Predictably, perhaps, the US Department of Defense (1984) report claimed that: 'Without the polygraph as an investigative tool, a number of espionage cases never would have been solved' (p. 13). Two years later, the *BPS Working Group Report* on the use of the polygraph in criminal investigation and personnel screening, prepared under the chairmanship of Professor Anthony Gale at the request of the Society's Scientific Affairs Board, concluded that polygraph tests are unlikely to be used in personnel selection generally in Britain; they raise serious efficacy concerns in the context of criminal investigations that need to be addressed by future research; they are irrelevant in the context of the security services; and, finally, the

Working Group seriously doubted whether such evidence would ever be admissible in British courts of law (pp. 80–1).

One of the strongest criticisms levelled against the polygraph by its opponents is that: ‘Unlike the fictional Pinocchio, we are not equipped with a distinctive physiological response that we emit involuntarily when, and only when, we lie’ (Lykken, 1988:124). Lykken, perhaps the best-known critic of the polygraph, does nevertheless accept that: ‘Polygraphic detection of guilty knowledge, based on entirely different and more plausible assumptions, has proved itself in the laboratory and deserves control study in the field of criminal investigation’ (p. 125).

Opponents of the polygraph also repeatedly point to its bias against the innocent, that jurors are likely to be influenced by its results (but see Cavoukian and Heslegrave, 1979; Honts and Perry, 1992), that it constitutes an invasion of people’s privacy, and that the storage and potential use of polygraph charts and the information that accompanies them is wide open to abuse. Meanwhile, there is no doubt that the polygraph will continue to be used in countries like the United States and Israel in the context of criminal investigation and national security. The hope is that the courts will play a more effective role in regulating its use and enforcing strict ethical standards on its practitioners. Meanwhile, according to

Polygraph examiners should be conscious of the polygraph’s limitations and acknowledge them.

Honts (2004:119), since the mid-1990s the US government has carried out research into improving the validity of the national security psychophysiological detection of deception (DoPPP, 1998) but there is no published research on whether the new accuracy rates reported for new laboratory tests (for example, the Test for Espionage and Sabotage, TES) generalise to the field. This is not to conclude that polygraph tests should not be used but, rather, that polygraph examiners should be conscious of the polygraph’s limitations and acknowledge them.

8 BRAINWAVES AS INDICATORS OF DECEITFUL COMMUNICATION

In view of the limitations and the controversy surrounding the use of the polygraph to detect lies, researchers in the United States have identified patterns of brain activity that betray a liar. If we accept their findings it would mean police could use magnetic resonance scans to detect lies by criminal suspects. Presenting the brain with a discrete stimulus generates an electrical signal known as event-related potential, which is approximately a few millionths of a volt in size (Iacono, 1995:168–70). This takes place against the brain’s background electrical activity. The P300 brainwave is one particular type of event-related potential that is evoked by relatively uncommon stimuli but which has special significance for a person. A number of laboratory studies have reported using P300 waves to distinguish guilty and innocent alternatives in guilty knowledge experiments (Allen et al., 1992; Boaz et al., 1991; Farewell and Donchin, 1991; Rosenfeld et al., 1991).

A research team led by Daniel Langleben at the University of Pennsylvania has carried out guilty knowledge test studies using functional magnetic imaging (fMRI) and reported⁴² that when people lie it is more likely to activate sections of the brain (anterior cingulate gyrus and parts of the prefrontal and premotor cortex) that are important in how people pay attention to, monitor and control errors than when telling the truth. In a more recent study by Mohammed et al. (2006), 11 volunteers took part in a simulated incident exchanging shots in a special area. Five of the subjects were told to tell the truth about the event and five to lie. Comparing the results of a polygraph examination with those obtained using fMRI revealed that the latter identified lies correctly 92 per cent compared to 70 per cent accuracy of the polygraph. The available research on fMRI has also revealed that when we tell a lie our brain must first suppress the truth and, also, twice as many (14) different points on the frontal lobe are activated when we lie but only seven when we tell the truth. In other words, the increased neural activity in the prefrontal cortex during deception (Spence et al., 2006)⁴³ indicates that lying is more cognitively demanding than telling the truth (Vrij et al., 2006). Vrij (2008) reviews eleven fMRI lie-detection studies and concludes that the technique has not been shown to be more accurate than the polygraph but he is in favour of more research with fMRI in order to increase our 'theoretical understanding of the mental processes associated with deception' (p. 372). Meanwhile, what is certain is that it will be impossible for liars to learn to control the electrical impulses in their brains that generate thought because individual neurons begin to 'fire' in response to a stimulus before a person is conscious of the fact.

The EEG P300 brainwave, developed by Dr Lawrence A. Farwell, has been both patented and applied in criminal justice cases in the United States by Brain Fingerprinting Laboratories, a private company he has founded. In one widely-publicised case, the Iowa Supreme Court, on 23 February 2003, overturned the 24-year-old conviction of Terry Harrington in the light of brain fingerprinting evidence presented in court that the record stored in Harrington's brain did not match the crime scene. Confronted with the evidence, the only alleged witness confessed he had lied at the original trial to avoid being prosecuted for the crime himself. Brain fingerprinting has also been used in Missouri to catch a serial killer.⁴⁴ Brain fingerprinting also has national security applications. Concluding on brain-waves and deception-detection, impressive successes of brain fingerprinting 'do not mean that the deception enigma is solved once and for all. Besides the fact that fMRI equipment is extremely expensive, immobile and demands a target to remain still, the studies conducted so far are very few' (Granhag and Hartwig, 2008a:149).

9 STYLOMETRY

Drawing on Gudjonsson (1992a), stylometry is a branch of linguistics and literary studies that tries to authenticate the creator of a written or even spoken language

text.⁴⁵ It is assumed that a person's stylometric features do not change with time. Thus, the argument goes, no two individuals are significantly the same in how they express themselves through language: how often they use particular vocabulary, combinations of words or how they structure their sentences. Stylometry can also be used to comment on the mental state of a person when he/she made a statement to the police, for example. To illustrate, it is known that people's use of the verb:adjective ratio changes according to one's emotional arousal (Gudjonsson, 1992a:194). To authenticate a document, a stylometrist might decide to count the most frequent linguistic characteristics in a document, quantitatively analyse the language structure used in terms of its vocabulary, grammar, syntax and spelling (see Morton, 1978; Morton and Michaelson, 1990).

Examination of case law pertaining to the admissibility of stylometric evidence in the UK, the United States and Australia shows that stylometry has had a mixed reception in the courts (Robertson et al., 1994). It was not admitted in the well-known case of Patty Hearst⁴⁶ (*US v. Hearst*, 418, F Sup 893 (1976)) on the grounds that it failed the *Frye* test (*Frye v. United States*, 293 FR 1013 (1923) now superseded by the *Daubert* criteria, see chapter 7). Stylometric evidence was admitted in England in *The Queen v. McCrossen* (unreported, 10 July 1991 CA (Cr.D.)) and in *Mitchell* (unreported, 82/2419/E2). In Australia, stylometric evidence was rejected in *R v. Tilley* ((1985) VR 505), in which Justice Beach rejected the argument that 'a person's oral utterances would be stylometrically consistent with his or her written work' (Robertson et al., 1994:646). According to Freckelton and Selby (2005:65), in *Jamieson v. The Queen* (1962) 60 A.Crim.R 68 at 77, Gleeson CJ 'complained of a failure in the case before him to establish that stylometric evidence was a "recognized field of scientific experience"'. The British forensic psychologist Canter (1992), argued that there is no empirical evidence showing that an individual's stylometric features are consistent over a long period of time. The future of stylometric evidence does not seem optimistic either in the UK or in Australia and we need to wait and see how courts in the United States will treat expert stylometry testimony on the basis of the *Daubert* decision, that is, whether they will regard the theory underpinning it as scientific.

10 STATEMENT REALITY/VALIDITY ANALYSIS (SVA)

Following a West German Supreme Court decision in 1954, German psychologists came to play an important part appearing as expert witnesses in court testifying on the truthfulness of witness statements, especially in sex cases, utilising a method known as statement reality analysis, developed by Undeutsch and known widely as statement validity analysis (SVA).⁴⁷ Statement validity analysis was developed in Sweden and Germany where it is used as evidence in criminal courts. SVA has also been used in courts in Australia, the Netherlands, Austria, the UK and Switzerland (Köhnken, 2004:60) in connection with statements by child witnesses or alleged

victims of sexual abuse. The theoretical basis of this technique is that people's accounts of events actually experienced are both quantitatively and qualitatively different from fictitious accounts, whether invented or coached. SVA is perhaps the most popular technique for assessing the veracity of verbal statements. The SVA consists of three main elements: (a) a structured interview; (b) a criteria-based content analysis (CBCA) which assesses systematically the contents and qualities of the statement made; and (c) a set of questions (validity check list) that evaluates the outcome of the CBCA. Undeutsch (1982) put forward eight reality criteria (features) for deciding the objective reality, and truthfulness, of a statement. The criteria are: 'originality; clarity; vividness; internal consistency; detailed descriptions which are specific to the type of offence alleged; a reference to specific detail that would under normal circumstances be outside the experience of the witness or victim; the reporting of subjective feelings' and, finally, 'spontaneous corrections or additional information' (Gudjonsson, 1992a:201). Steller and Köhnken (1989) were critical of earlier work on this technique and proposed using a total of 29 criteria instead of Undeutsch's eight,⁴⁸ which are more likely to be found in truthful than in deceptive statements.

Drawing on Vrij (2000:117),⁴⁹ the following are the nineteen CBCA criteria:

- *General characteristics*: logical structure (that is, coherence and consistency in the statement; unstructured production (that is, the account does not follow a chronological time sequence); quantity of details (that is, the statement contains a significant amount of detail).
- *Specific contents*: contextual embedding (that is, the event concerned is situated in locations, in personal relationships to the accused and others before and following its occurrence); descriptions of interactions (that is, an account is provided of the sequence of actions and reactions); reproduction of conversation; unexpected complications during the incident; unusual details; superfluous details; accurately reported details misunderstood; related external associations; accounts of subjective mental state; attribution of perpetrator's mental state.
- *Motivation-related contents*: spontaneous corrections; admitting lack of memory; raising doubts about one's own testimony; self-deprecation; pardoning the perpetrator.
- *Offence-specific elements*: details characteristic of the offence.

Logical structure, unstructured production, quantity of details, contextual embedding, and description of interactions (see Marxsen et al., 1995, for details) are considered the minimum necessary for a statement to be coded as truthful. *Related external associations* (that is, if a child reports details that are not part of the allegation but are related to it) and if a child or adult provides *accounts of his or her subjective mental state* or makes an *attribution of the perpetrator's mental state* are additional possible truthfulness indicators (Vrij, 2007:84). If any of the remaining 14 criteria are also present, this adds to the credibility of the statement but their absence does not render a statement untruthful. At least two additional criteria

are considered sufficient for a statement to be classified as credible (Marxsen et al., 1995:455). According to Vrij (2007:84), in contrast to a deceptive statement, a truthful one will contain information which is inconsistent with the stereotypes of truthfulness and the CBCA includes five 'contrary-to-truthfulness stereotype' criteria (Ruby and Brigham, 1998), which include spontaneous corrections by the witness or alleged victim and admitting lack of memory (for example, 'I'm not sure, perhaps', etc.).

Vrij (2000:123) lists the following 11 items that comprise the validity check-list, adapted from Steller (1989):

- Psychological characteristics (of the interviewee):
 - 1 inappropriateness of language and knowledge
 - 2 inappropriateness of affect
 - 3 susceptibility to suggestion.
- Interview characteristics:
 - 4 suggestive, leading or coercive questioning
 - 5 overall inadequacy of the interview.
- Motivation:
 - 6 questionable motives to report
 - 7 questionable context of the original disclosure or report
 - 8 pressures to report falsely.
- Investigative questions:
 - 9 inconsistency with the laws of nature
 - 10 inconsistency with other statements
 - 11 inconsistency with other evidence.

Qualified support for the CBCA was reported by Horowitz et al. (1997), who used judges on two occasions and transcripts of interviews with 100 alleged victims of child sexual abuse to examine the inter-judge and test-retest reliability of CBCA for the presence of the original 19 criteria. They found that all the criteria had adequate test-retest reliability, 14 criteria were reliable across raters but the inter-judge reliability of individual criteria varied.

Using statement validity analysis, Undeutsch (1982) claimed to have found victims to be truthful in 90 per cent of 1500 cases he examined. This finding is of interest in view of the fact that 95 per cent of the defendants involved in those cases were, in fact, convicted. Empirical support for the 'Undeutsch hypothesis' has also been reported by Yuille (1988), Steller and Boychuk (1992) with children, Esplin et al. (1988, cited in Raskin and Esplin, 1991), Zaparniuk et al. (1995) Akehurst et al. (2001) and Parker and Brown (2000). Due to the trouble in establishing ground truth, it was proven very difficult to ascertain the veracity of children and adults with CBCA (Vrij, 2007:86).

The review of the 37 studies by Vrij (2005) reveals an average accuracy rate of 73 per cent for correctly classifying truthful statements as truthful and a

72 per cent average accuracy rate for correctly classifying deceptive statements as deceptive. The overall accuracy rate of 73 per cent (Vrij, 2003; Köhnken, 2004) is not high enough to justify the admissibility of SVA as evidence in court (Granhag and Vrij, 2005:55).

If a lie-detection technique is worth adopting, it should be possible to teach to those who are going to use it in the context of their work (Raskin and Esplin, 1991). However, while some researchers have reported positive findings (see Landry and Brigham, 1992; Köhnken, 2004), others have reported negative findings for CBCA valuation training (see Joffe, 1992; Yuille et al., 1993; Akehurst et al., 2000). Additional weaknesses of statement validity analysis have also been reported: its subjectivity, possible differences between statement analysis carried out ‘post hoc from a transcript or videotape of an interview and statement analysis done during the interview by the interviewer’ and the fact that brief narrations (often a characteristic of rather young children) are not amenable to analysis (Marxsen et al., 1995). In addition, expert raters, using only one aspect of the statement analysis (criterion-based content analysis) have difficulty differentiating actual events in statements by children from events in their statements persistently suggested to them during interviews over a long period of time (Huffman, 1995, cited by Ceci et al., 1995:514).

Some evidence that the CBCA should not be used in court proceedings in its present form has been reported by Santtila et al. (2000). Their Finnish study examined the effects on the CBCA criteria of age, verbal ability (assessed with the Weschler Intelligence Test for Children-Revised vocabulary) and the emotional style of the interviewer. The subjects were 68 children aged 7–8, 10–11 and 13–14 years, who made a true and a false statement about a mildly traumatic event. It was found that while the correct classification rate was 66 per cent, a child’s age and verbal ability increased the occurrence of some of the CBCA criteria irrespective of the truthfulness of the statements. Santtila et al. also found that different criteria differentiated between true and false statements in different age groups of children and, finally, the interviewer’s emotional style affected the occurrence of the criteria. Vrij (2000:126–36) listed two major limitations of SVA.

- 1 SVA is not a standardised instrument because: (a) there are no CBCA rules to determine the number of criteria that need to occur for a statement to be truthful or not; (b) there are no rules regarding the weighting of the different criteria; (c) external factors impact on the criteria; and, consequently, (d) SVA assessments are subjective; and, finally, (e) it is not clear where the method can be used.
- 2 SVA lacks theoretical underpinning.

Vrij (2007:84–85) points out two additional limitations of SVA, namely: (a) CBCA scores are influenced by external factors that no one knows whether they are taken into account by SVA experts; and (b) some empirical evidence from

While empirical support has been reported for statement validity analysis, criticisms have also been levelled against it.

Sweden (Gumpert and Lindblad, 1999) indicates that SVA experts rely on the CBCA outcome for the validity checklist and their final decision.

Vrij (2007) has drawn attention to the fact that testing the accuracy of SVA assessment may sound a straightforward task but it is not because in experiments with low ecological validity, accuracy is easy to determine; however, in the field ground truth is difficult to ascertain. Also, if confession by the suspect is used as a criterion, the difficulty is that a confession is not always independent from SVA veracity judgements (p. 85). Finally, another difficulty in this context is that often SVA is used when there is no other evidence against the suspect. CBCA scores have been shown by researchers to be affected by factors other than the truthfulness of the statement, including the style and approach of the interviewer (Köhnken et al., 1995) and the cognitive abilities of the interviewee (Buck et al., 2002). In considering studies of CBCA accuracy, it needs to be remembered that most studies reported are laboratory ones low on ecological validity, only a limited number of field studies have been reported and, finally, field studies face the difficulty mentioned above that ground truth is problematic in cases in which SVA is used (see below). Consequently, no reliable data pertaining to the accuracy of CBCA assessments in real-life cases is yet available (Granhag and Vrij, 2005).

Vrij (2000:153–6) has drawn attention to the need for future research to examine: SVA assessments; the utility of CBCA with statements made by suspects; the relevance of the technique in situations other than in a judicial context; the issue of whether people who are aware of the CBCA criteria can subsequently make false statements that mislead evaluators; cultural differences; and, finally, since the CBCA criteria are in fact cues to truthfulness, researchers should also include lie indicators to the criteria and examine their effect on detection accuracy. The extent to which SVA assessment satisfies the *Daubert* criteria has been assessed by Vrij (2007), who concludes that SVA is scientifically testable as far as laboratory but not field studies are concerned. It also satisfies the criterion of having been subjected to peer review and publication. Regarding the question whether there is an error rate, the answer is ‘yes’ for CBCA for laboratory research but not for field studies and, also, no error rate is known about the Validity Checklist and the SVA method as a whole. Finally, the CBCA method and the Validity Checklist are not generally accepted in the scientific community and, thus, it does not satisfy another of the *Daubert* criteria. Consequently, SVA evaluations are not accurate enough to be admitted as expert scientific evidence in criminal courts but might be useful in police investigations (Vrij, 2003).

The available empirical literature provides support for Undeutsch’s basic proposition that the memory of someone who has had a real experience will differ in both quantity and quality from that which a person who has not had the experience could fabricate. CBCA can differentiate between truthful and fabricated statements better than chance but mistakes are made, especially as far as detecting lies are concerned (Vrij, 2000:157). The available literature shows that while the SVA can be a useful tool in police investigation of an alleged crime, especially child abuse

cases for which it was specifically developed, it suffers from a number of serious weaknesses that detract from its accuracy. Therefore, its admissibility as evidence in the courts, as has been the case in Germany, is debatable. Based on his assessment of the empirical evidence, Köhnken (2004) concluded that SVA has its strengths, weaknesses and limitations, like other diagnostic procedures. The crucial question is whether this method is significantly better in identifying the credibility of a statement compared to other deception-detection methods that are available (p. 61). Köhnken goes on to answer the question posed in the affirmative as far as the polygraph and cues to deception are concerned. As far as it has been possible to ascertain, there has been no legal test of the question of the admissibility of expert statement analysis testimony in British, US or Australian courts. The results of such analysis would be particularly useful to both judges and juries in alleged sexual abuse cases. On the basis of his very extensive review of SVA assessments, Vrij (2008:255) concludes that: (a) they should not be allowed as evidence in courts; (b) if such evidence is admitted, the court should be informed by more than one SVA expert witness about the limitations of SVA; and (c) he himself does not object to CBCA analyses being used in contexts other than the courts.

11 REALITY MONITORING

Unlike the CBCA, reality monitoring includes lie criteria which can be used in different settings and not only in sexual abuse cases since it focuses on memory characteristics of actual events one has experienced and imagined ones but, like CBCA, it is based on the hypothesis that memories from experienced events differ in quality from memories of imagined events. According to Johnson and Raye (1981) and Johnson et al. (1988), the basic premise of this particular lie-detection method is that the difference between the two types of memories is that memories of real events are clear and vivid, they derive from perceptual processes and, consequently, are more likely to contain: perceptual information (to do with the five senses); contextual information (that is, detailed information regarding when and where someone had a particular experience); and, finally, affective information (that is, details concerning how the individual felt during the experience/event in question). On the other hand, a fabricated memory/statement about an imagined event originates in an internal source and is likely to be characterised by cognitive operations like thoughts and reasonings.

Since there is no standardised reality monitoring criteria, let us, like Vrij (2000:159, Table 6.1), draw on Sporer's (1997) list, as it was published in English: clarity; perceptual information; spatial information; temporal information; affect; reconstructability of the story; realism; and cognitive operations. A number of researchers have used reality monitoring criteria to detect lies (see Vrij 2000:161–5, and Sporer, 2004, for a review). Vrij surveyed 12 such studies and concluded that, compared to statements about fabricated events, statements about real experiences contain more perceptual information, more spatial information and more temporal

information (p. 162). Regarding accuracy rates for reality monitoring, they were found by three studies that used adult subjects to be: 71 per cent (Vrij et al., 1999), 61 per cent (Hofer et al., 1996) and 75 per cent (Sporer, 1997). The accuracy of lie-detection was found by the same three studies to be 74 per cent, 71 per cent and 68 per cent respectively. It can be seen that the accuracy rates reported are much higher than chance level but not high enough to justify the admissibility of reality monitoring as evidence in court. It has also been found that accuracy rates using reality monitoring are affected by time-delay (Johnson et al., 1988; Sporer, 1997) and become problematic with children (Alonso-Quecuty, 1992). Vrij et al. (2007) used CBCA and reality monitoring to measure verbal cues to deception revealed by three different interview styles used by police and found that reality monitoring distinguished between truth-tellers and liars better than CBCA. As Sporer (2004:19) points out in his evaluation of reality monitoring, no conclusion is possible about its usefulness in differentiating truthful and deceptive statements; studies have been carried out in Sweden, Finland, Canada, the United States, France and the UK but different authors have used different reality monitoring criteria, which they have defined and measured differently, rendering comparison of their findings problematic. Sporer goes on to conclude that the empirical evidence provides mixed support for reality monitoring and proposes the use of an integrative framework – the Judgement of Memory Characteristics Questionnaire (JMCQ) – which is an instrument for assessing other people's accounts that could integrate reality monitoring with CBCA. Vrij (2000) also recommended combining the CBCA and reality monitoring methods. The challenge is for researchers to test the validity of Sporer's integrative framework across different populations in the field in a broad range of ecologically valid situations. Thus, reality monitoring would appear to be a useful tool in the investigation stage when used with adults for recent events.

12 SCIENTIFIC CONTENT ANALYSIS

Another method of statement analysis that has been suggested as useful in detecting deceptive communication is scientific content analysis (SCAN),⁵⁰ developed by Avinoam Sapir, an ex-police polygraph examiner from Israel. This is a technique more familiar to an elite number of secret services personnel, law enforcement, armed forces and private sector investigators who have been introduced to it than to psychologists (Driscoll, 1994). The assumptions of SCAN are that: (a) there are significant differences between truthful and deceptive accounts; (b) the suspect's words must be produced without any help from the interrogator; and (c) every individual has his/her unique linguistic code, with the exception of pronouns. SCAN utilises a number of criteria to analyse the transcript or written statement of an individual, including denial of allegations, emotions, and change in language. According to Driscoll (1994: 80–1),⁵¹ these criteria include the following and show how they point to a deceptive communication: pronouns (a change or absence), spontaneous corrections (their use), emotion (if located near the peak

of the story rather than throughout), connections (their use, for example, 'later on', 'the next thing I remember'), first person singular, past tense (deviations from these), time (a deceptive statement will have more lines written before the key issue or offence than after it) and, finally, changes in language use (inconsistent use of language indicates deception, as when 'a nice guy' becomes 'that man'). The coding of SCAN is less standardised compared with the CBCA and reality monitoring (Granhag and Hartwig, 2008a:142). It should also be noted that SCAN is used with adults. Driscoll reported SCAN analysis of 30 written statements given voluntarily by crime suspects prior to being given a polygraph test by the same examiner. Scoring of the statements indicated that the technique 'is capable, within limits, of differentiating between probably accurate statements and likely false statements' and compares well with the polygraph in effectiveness (p. 86). He found that one criterion, 'Denials of allegations', predicted 77 per cent of truth-tellers and 88 per cent of liars. Like Porter and Yuille (1996) in their laboratory study, Driscoll accepted that ground truth in his study was problematic and urged caution in accepting his findings. Smith (2001) reported a field study of SCAN for the British Home Office in which she asked five groups of assessors (three groups of SCAN users, one group of SCAN-untrained experienced detectives and one group of SCAN-untrained newly recruited officers) to assess 27 statements. She reported that: (a) three criteria that distinguished between truthful and deceptive statements, namely, 'denial of allegations', 'missing information' and 'tense change'; (b) there was no significant consistency in the criteria used by different assessors; (c) the different groups of SCAN-trained assessors correctly distinguished 80 per cent of the truths and 75 per cent of the lies; and, finally, (d) the accuracy of SCAN users and non-users was not significantly different. Smith concluded that caution is warranted in considering adopting SCAN widely. In a laboratory study by Vanderhallen et al. (2008) in Belgium where ground truth was known it has also been found that SCAN training does not make any significant difference to police officer's ability to correctly classify truthful and deceptive statements. More research in ecologically valid situations in which ground truth is known is needed, however, before definitive conclusions can be drawn about the forensic utility of SCAN in detecting written deceptive communication. SCAN researchers should also work towards providing a theoretical framework for the technique, standardise the use and scoring of the different criteria, also addressing the fact that some SCAN predictions contradict what is already established in CBCA research, such as whether, for example, liars make more 'spontaneous corrections'. At present, as Adams (1996) suggested, SCAN should be used to guide further questioning of suspects rather than as an instrument for detecting deceptive statements accurately.

CONCLUSIONS

Despite the importance of deception as a social phenomenon, we cannot as yet speak of a psychology of deception. Early psychological research into deception

was largely concerned with explaining conjuring tricks but was eclipsed by the rise of behaviourism. The wide use of integrity/honesty tests in pre-employment screening remains controversial, as different evaluations of the validity of such tests have reached rather different conclusions. However, the weight of the evidence does not support their use. There still remain serious difficulties in attempting to evaluate integrity tests, such as the absence of consensus on what is meant by 'integrity'.

A lot of research has been carried out into both non-verbal and verbal cues to deception. While studies have established a number of both verbal and non-verbal cues of deceptive communication, humans, including trained and experienced law-enforcement personnel (but apparently with the notable exception of US Secret Service agents) turn out to be approximately as good as chance in detecting deception. The consolation is that most people are better than chance in deceiving others. However, the external validity of most studies of deception-detection by law-enforcement personnel is questionable. One possible explanation why lie-detection accuracy is so low even among experts, blames some of the stereotypical and wrongful advice on cues to deceptive behaviour provided in books on interrogation methods for police. Insights into the background experiences, personality attributes, thinking and decision-making processes underlying highly accurate lie-detection by a very small number of exceptional human beings (that is, wizard lie-catchers) is emerging from the work on such people by Paul Ekman and his co-workers. As far as the voice stress analysis/PSE is concerned, research results do not support claims made for it.

Regarding the much-researched and talked-about polygraph, the main issue is its accuracy in general and the false positive rate in particular, as well as ethical concerns about its wide use. Researchers have reported false positive rates ranging from 4 per cent to 20 per cent and false negatives from 4 per cent to 15 per cent. Interestingly, neither the directed lie control nor the control question are accurate enough to satisfy the *Daubert* criteria for admissibility as expert evidence. The guilty knowledge technique has been shown by Israeli researchers to be a useful tool in criminal investigations and to protect innocent suspects from being labelled as guilty but fails to meet all the *Daubert* admissibility criteria.

In considering the accuracy of the polygraph with whichever technique, it is important to remember that such factors as how experienced the examiner is, the trait anxiety of the examinee and the use of certain countermeasures (for example, that augment one's responses to control questions) can influence the test outcome. Even strong opponents of the polygraph accept that, properly used, the polygraph can be a useful tool in criminal investigations. Whether a police force should be allowed to use it, let alone whether such evidence should be admissible in court, is a question left entirely to the legal systems of different countries and their parliaments to decide. The answer would seem to depend on how a society decides to balance the rights of the individual citizen on the one hand and police powers on the other. Computerised lie-detection is a very recent development and

the results reported attest to its potential and the need for more field studies high on ecological validity. Knowledge about the working of the brain (P300) has already been useful in a forensic context in proving the innocence of convicted persons and exposing miscarriages of justice while lie-detection research utilising fMRI has already reported high lie-detection accuracy rates.

As far as stylometry is concerned, despite some researchers' awarding it good marks as an effective method for authenticating the authorship of a given text, Australian courts, unlike courts in England, have shown a reluctance to allow such expert testimony, and the research that has given rise to the technique has come under attack.

Rather impressive results have been reported over the years from Germany and elsewhere regarding the usefulness of statement reality analysis in determining the truthfulness of both a child's or an adult witness' statement. It is a technique that, despite its limitations, undoubtedly deserves more attention from psychologists, lawyers and the judicial profession in common law countries. Finally, the SCAN technique appears to deserve more field testing before it is recommended for use by law-enforcement investigators. Future research should also examine the comparative effectiveness of different techniques available (for example, reality monitoring or scientific content analysis) for identifying deceptive communication, both oral and written, and the merits of their theoretical underpinnings. Meanwhile, the search for new methods continues. A method that has been suggested as potentially useful in detecting deception uses electronic noses to sniff and measure differences in a person's body smells that occur when people are under stress, such as when they are lying (Coghlan et al., 1995).

REVISION QUESTIONS

- 1 What gender differences have been reported as far as lying is concerned?
- 2 What are some limitations of integrity/honesty tests?
- 3 What vocal and non-vocal indicators of deception characterise the majority of liars?
- 4 Why do even experienced police investigators find it difficult to detect lies at better than chance?
- 5 How accurate can the polygraph be in detecting lies? Should such evidence be admissible in court? If not, why not?
- 6 Is the event-related brain potential technique a window into a brave new world where nobody will be able to lie? If yes, what are the policy implications?
- 7 Should the criteria-based content analysis (CBCA) be admissible in court? If not, why not?
- 8 In what way is the reality monitoring method an improvement on CBCA?
- 9 What is still lacking in the SCAN method?

ADDITIONAL READING

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9

WITNESS RECOGNITION PROCEDURES

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Few problems can pose a greater threat to free, democratic societies than that of wrongful conviction – the conviction of an innocent person.

(Huff et al., 1986)

... it has been my experience that many prosecutors prefer to have unclear, informal procedural policies for lineups so that, no matter how the lineup was conducted, it could never have violated the procedural policy.

(Wells, 2005:490)

For the criminal justice system, the current findings suggest that police and courts should treat voice identification made by auditory–visual witnesses with caution.

(Bull and Clifford, 1999)



All these shortcomings lead to the horrifying conclusion that in the investigation of war crimes, with hundreds of thousands of victims, identification is simultaneously the most important and the most neglected issue.

(Wagenaar, 2008:7)

INTRODUCTION

Very often, the identity of the perpetrator of a crime is not an issue or it can be readily established by the prosecution. In such cases, the primary concern of police investigators is to establish the necessary points of proof regarding the charges laid against the defendant. However, in those cases where a criminal offence has been committed and the issue is whether the defendant has been identified by a witness as the person who committed it, visual witness identification may involve one of the following: single confrontation identification, photograph identification, photo-board identification, video-film identification and, finally, identification by means of a line-up (that is, an identification parade). Courts have discretion to exclude witness identification evidence which has been obtained illegally, unfairly or improperly, as when a suspect was forced into taking part in a line-up or a police officer somehow communicated to a witness who the suspect was before a line-up was conducted, or when a line-up should have been conducted but was not or, finally, when the suspect's photograph 'stands out' in a photo-board or video-frame.

There is evidence from different sources that an eyewitness identification problem does exist.

We saw in chapter 2 that the issue of person identification has been of central concern to eyewitness researchers since the 1970s. At the same time, there is widespread concern about biases in police identification practices and procedures that result in the false identification of innocent citizens. Wells et al. (1998) describe 40 cases in which DNA analysis established retrospectively that persons had been wrongly convicted; of those convictions, 90 per cent were based on identifications in which one or more witnesses falsely identified the accused as the perpetrator of the crime. In support of Brandon and Davies (1973) and Huff et al. (1986), Wells et al. (1999) pointed out that 'mistaken identification by eyewitnesses is probably the largest single cause of the conviction of innocent persons', as shown by the DNA cases (p. 57). Wells et al. (1994:224) list three sources of support for the basic assumption 'that there is an identification problem': empirical studies reporting high rates of false identifications; the 'sincerity' and confidence of subjects in such studies reporting false identifications; and actual cases of wrongful convictions. The following example from Britain (cited in Ainsworth, 2000a:166) shows the danger of convicting an innocent person on line-up identification.

CASE STUDY

Line-up misidentification

In October 1992 a man went up to a taxi driver and threatened him with a gun. He then proceeded to place a bomb in the taxi and ordered the driver to deliver it to the street in central London where the British Prime Minister lived. Suspecting the content of the parcel in his cab, the cab driver abandoned the taxi in Whitehall and managed to shout a warning before the bomb went off. Afterwards, the police arrested Patrick Murphy, an Irishman, who had no doubts about his innocence, did not request to see a lawyer and agreed to take part in a line-up. To Murphy's astonishment, the taxi-driver and two other witnesses identified him as the offender who placed the bomb in the taxi, he was detained in custody and the Crown Prosecution Service got on with the job of preparing the legal brief to bring him to justice. Fortunately for Murphy, he was able to prove his innocence by producing 11 witnesses who testified that at the time of the crime he had been attending a meeting of Alcoholics Anonymous. In the face of such overwhelming evidence for Murphy's alibi, the Crown Prosecution Service dropped the charges against him and he was released. As we shall see in this chapter, Patrick Murphy has not been the only innocent Irishman who has been wrongly arrested and charged; in fact, Murphy was lucky: the Guildford Four and the Birmingham Six spent years in prison as convicted IRA bombers before they were able to prove their innocence.

How, then, is it possible for witnesses to identify in a line-up an innocent person they have not seen before as the perpetrator of a crime and to do so with great confidence? By the end of this chapter, the reader should be able to answer this question.

Formal recognition of the dangers of misidentification is no new thing.¹ Police constables in the newly-established Metropolitan Police in London were issued in 1860 with instructions regarding the identification of persons charged with offences (*Police Orders*, 1860). Furthermore, in England and Wales, after 15 witnesses mistakenly identified Alfred Beck, it led to a committee of inquiry in 1905² that was instrumental in establishing the Court of Criminal Appeal by the *Criminal Appeal Act 1907* (Archbold, 2008:14–1). At the same time, detailed instructions on offender identification procedures were issued in the form of regulations for the Metropolitan Police by the Home Office (1905), thus introducing uniformity of approach across all the local constabularies in England and Wales. Similar concerns about miscarriages of justice as a result of mistaken eyewitness identification in the early 1970s (see Brandon and Davies, 1973)³ led to the Devlin Committee

(Devlin, 1976) making, *inter alia*, the following recommendations to avoid such misidentifications:

- if the only evidence against an accused is that of eyewitness testimony, the case should be dropped by the prosecution
- should such a case be brought to trial, the judge should direct the jury to acquit.

Significant improvements have been made in Britain to the police procedures concerning interviewing witnesses and questioning suspects by the introduction of legislation and the issuing of very detailed guidelines as good practice by the Home Office. This includes *Achieving Best Evidence*, the *Police and Criminal Evidence Act (PACE) 1984*, and its *Codes of Practice* and the circular on voice line-up identification (see below), utilising scientific knowledge. Of course, there is always a need to evaluate the use and effectiveness of such guidelines in order to further improve them. Without ignoring the significance in the United States of the National Institute of Justice *Guide* (see Technical Working Group on Eyewitness Evidence, 1999), it would not be an exaggeration to say that the risk of miscarriages of justice in Britain has been significantly reduced. Furthermore, written identification procedures are both more uniform as well as more sophisticated in England and Wales than in the United States (Wells, 2005:484). Interestingly, Phillips and Fisher (2001)⁴ reported that mock jurors' knowledge about police compliance with recommended identification guidelines has been found to lead to better rating of evidence accuracy and more guilty verdicts. Serious similar concern in the United States about innocent persons getting convicted on the basis of eyewitness misidentification led Janet Reno, the then US Attorney-General, to set up a panel of lawyers, police officers and psychologists (see Wells et al., 1998) to provide guidelines (see below) for establishing identification by means of line-ups or photo-spreads. In England and Wales suspect identification guidelines are to be found in Code of Practice D of PACE (1984). More specifically, Code D deals with the main methods used by the police to identify people in connection with the investigation of offences and the keeping of accurate and reliable criminal records. As stated in Code D, the procedures provided are designed to: (a) test the witness' ability to identify the person they saw on a previous occasion, as well as (b) to provide safeguards against mistaken identifications (para. 1.2). The principal suspect identification methods dealt with in Code D⁵ are by fingerprints, footwear impressions, body samples, taking photographs of arrested people, such bodily features as tattoos and scars as well as by showup, video identification and group identification. In the United States, such guidelines on suspect identification are to be found in *Eyewitness Evidence: A Guide for Law Enforcement* (Technical Working Group for Eyewitness Evidence, 1999).

Judges are required to warn the jury about the dangers of eyewitness identification evidence.

Recognising the dangers inherent in person identification, trial judges in Britain are required to warn the jury about identification evidence of witnesses in the terms required by *Turnbull and others* ((1977) QB 224, at 228–31, 63 Cr.App.R. 132 at 137–40).⁶ Such warnings are also to be taken into account by magistrates.

According to Archbold (2008:1505–6), the *Turnbull* warning requires that a judge should:

- warn the jury of the special need for caution before convicting on witness identification evidence
- instruct the jury as to the reason for such a need
- inform the jury that a mistaken witness can be a convincing witness, and that more than one witness may be mistaken
- direct the jury to examine closely the circumstances in which each identification was made
- remind the jury of any specific weaknesses in the identification evidence
- if appropriate, remind the jury that mistaken recognition can occur, even mistaken identification of close relatives and friends
- identify to the jury the evidence capable of supporting the identification
- identify evidence which might appear to support the identification but which does not in fact have the quality.

As stated in *R v. Oakwell* ((1978), 66 Cr.App.R. 174), a *Turnbull* warning is generally required in all cases where identification is the sole or substantial issue and failure to follow these guidelines is likely to result in a conviction being quashed. The full *Turnbull* warning should be given where a defendant denies that he was present at the commission of the offence⁷ or where there exists a possibility of mistaken identification.⁸ Finally, the *Turnbull* guidelines apply equally to police who are identifying witnesses (*Reid v. R* (1990) A.C. 363, PC).

Fisher (1995) drew attention to the fact that police detectives who routinely question eyewitnesses and conduct line-ups (that is, identification parades) and photo-spreads (that is, identification from an array of mugshots) receive little or no training on how to interview a witness. Fisher's comment would seem to apply more to the situation in the United States than in the UK because police officers there have been routinely taught the cognitive interview technique (see chapter 4) for a number of years now. In addition, PACE has regulated police interviews of suspects and witnesses as well as the conduct of identification parades, resulting in the introduction of sequential line-up presentation to reduce the rate of false identifications from target-absent line-ups without having an impact on correct identifications from target-present line-ups. Sequential line-ups were also recommended by Wells et al. (1998) and the National Institute of Justice *Guidelines* (see Technical Working Group on Eyewitness Evidence, 1999). Admittedly, the existence of State police forces in countries like the United States, Australia and Canada makes it less likely that there will be uniformity in evidence and criminal procedure legislation and in police training, let alone in how to interview a witness or, finally, how to construct and conduct a line-up or a photo-spread. Concerning the situation in the United States, according to Wells (2005), there are more than 19 000 independent law-enforcement agencies across the country and 'almost any conceivable set of line-up procedures can be found somewhere in the country.

Furthermore, these procedures are commonly in considerable opposition to the procedures that are recommended on the basis of research findings' (p. 484). Wells goes on to remind his readers that despite more than 25 years of expert testimony research criticising line-up procedures, courts in the United States have not succeeded in issuing guidelines to reform line-up procedures because American judges do not see their role as including telling police how to collect evidence. In addition, Wells goes on to point out that while police are more likely than prosecutors to perceive problems with identifications procedures and are more receptive to suggestions on how to improve them, for such reforms to be implemented, they must have the support of chief prosecutors. Many prosecutors, however, have their own reasons why they 'prefer to have unclear, informal procedural policies for lineups' (Wells, 2005:490).

Irrespective of federal systems, there are, of course, differences in what police officers in different countries can legally do as far as witness identification procedures are concerned. To illustrate, at the time when PACE was being implemented in England and Wales, according to Wells and Turtle (1986) as many as a quarter of the cases in the mid-west in the United States involved a procedure whereby the police create a line-up comprising only the suspects in a crime. As Wells et al. (1994:228) put it, that procedure was 'like giving the witness a multiple choice test in which there can be no wrong answer'. Under the rules in the Code of Practice D, made under section 66 of PACE such a practice is prohibited in Britain.⁹ The same practice is also prohibited in Australia. Also, photo-spreads (see below) are by far the most common method used in the United States for establishing identification but are seldom, if ever, used in the UK. In addition, as already mentioned, unlike in the United States, in the UK since 2003 video line-ups have effectively replaced live identification parades and are video-recorded. Differences in the law of evidence and police procedures need to be borne in mind when generalising some research findings from one country to another.

Police person identification procedures, which most often involve the use of photographs, do not, of course, take place in a vacuum but in a social context. The witness has his/her memory of the event in question of which often one particular face is of special importance. At the same time, witnesses have their own expectations about the criminal investigation process they are contributing to and the evidence is overwhelming that mock-witnesses are more than ready to select a suspect from a line-up that contains only innocent foils (that is, a target-absent line-up). For their part, law-enforcement officers, often under a lot of pressure to detect (that is, clear up) crimes, are likely to have their suspicions about who the culprit is and would like the witness to confirm their suspicions. Consequently, some police officers may inadvertently and in a rather subtle, non-verbal way such as by smiling and showing approval (see Fanselow, 1975), or even quite openly (for example, in terms of the verbal instruction they give a witness to point out the criminal in the line-up) indicate to the witness who he/she should pick out from a photo array or in a live line-up.

Estimates of the percentage of cases involving wrongful conviction vary. In an attempt to obtain a more reliable estimate of the size of the problem, Huff et al. (1986) surveyed State Attorneys-General (50 States, District of Columbia, American Samoa, Guam and Puerto Rico) and an Ohio sample that included all presiding judges of common pleas courts, all county prosecutors, all county public defenders, all county sheriffs and the chiefs of police of Ohio's seven major cities. On the basis of a 65 per cent response rate, they reported that 71.8 per cent of those surveyed believed that wrongful felony convictions in the United States was less than 1 per cent. Taking the 1981 US figure for persons arrested and charged with index offences (2 291 560) and on the basis of a 50 per cent conviction rate, Huff et al. estimated that approximately 6000 are wrongly convicted annually (p. 523). This estimate, however, is rather crude as different crimes have different conviction rates. While it is impossible to have an accurate estimate of the number of wrongful convictions,¹⁰ the concern is twofold: an innocent person is wrongly convicted and suffers the consequences, while the real criminal is at large. Of course, it is common in criminal trials for the defence and the prosecution to disagree about the fairness of police-conducted identification procedures.

In the 1980s it was claimed that every year in the United States about 6000 people are wrongly convicted.

Before taking a close and critical look at the main witness-identification procedures, it is important to remember the following about the use of photographs as a method of identification, which mean that both police identification procedures and empirical research using photographs sacrifice a great deal of the memory potential of witnesses asked to perform a recognition task.

- Subjects in simulation studies using photographs are asked to recognise a target person by looking at static images of different faces.
- Such studies actually require picture recognition rather than face recognition (Bruce, 1988).
- Unlike a static picture, motion (for example, rotating a picture of a face 360 degrees) gives information about a face from a variety of views as well as detailed information about the effects of illumination, and can thus 'provide information that can be used to increase identification accuracy' (Pike and Kemp, 1995:26).
- The recognition involved in such a task is based on familiarity and is not identification as such because it takes place in the absence of contextual information, such as details of the culprit's body and the crime scene (Davies, 1989). As Davies pointed out, a crime victim/witness at a live identification parade must both recognise the suspect and place him/her in the appropriate context (p. 557). Furthermore, reinstating the context of an event improves eye-witnesses' recognition accuracy (see chapter 3).
- Recognition accuracy is higher for persons seen as actors in a film showing a robbery than for static, motionless pictures depicting faces devoid of bodies (Schiff et al., 1986).

- For understandable, ethical reasons, most simulation identification studies involve student subjects who have witnessed a staged crime or who are shown a video of such an incident and subsequently are asked to pick the culprit from a set of photographs under different conditions. This is a major limitation because it has been shown (see chapters 2 and 3) that real crime victims generally produce much more information than bystanders (MacLeod, 1987).¹¹

For an adequate understanding of suspect identification, both experimental simulation and field research are required.

In the light of such serious limitations of a great deal of the empirical literature on face identification, one cannot but agree with Davies (1989) that relying on photo identification does not do eyewitnesses justice and empirical studies focusing exclusively on this identification procedure has very limited forensic relevance (p. 559). Davies' grave warning should not go unnoticed by psychology researchers and police alike (see also Laughery and Wogalter, 1989). Of course, as mentioned in chapter 1, while laboratory studies of suspect identification are often low on ecological validity, they afford the experimenter control of a situation, enabling causal relationships to be established, field studies have the advantage of realism but lack control of pertinent variables and witness' accuracy cannot always be determined with certainty. For an adequate understanding of suspect identification, both experimental simulation and field research are required. In view of the pressures under which police investigators work in busy police departments in large cities, and irrespective of the identification procedure used, they would no doubt appreciate psychologists enabling them to distinguish accurate from inaccurate eyewitness identification.

1 IDENTIFICATION TEST MEDIUM

Given that there are different ways of presenting a suspect to a witness for identification – show-ups, live line-ups, videotaped live line-ups or photo-arrays, Cutler et al. (1994:164–6) mention a number of practical issues in choosing the identification test medium, namely, availability of suitable foils, the time it takes to construct it and where it can take place. Photo-arrays, however, allow a greater pool of persons to select foils from, are transportable, they prevent line-up members influencing the witness in any way while he or she is viewing the line-up and avoid the anxiety which most crime victims/crime witnesses would naturally feel when confronting the perpetrator of a crime face to face. The videotape is an increasingly more popular alternative to both live line-ups and photo-arrays and, as Cutler et al. and others have pointed out, it can provide a witness with the same information as a live line-up, is less expensive and time-consuming to construct, requires less personnel and, finally, prevents the witness being cued by foils as to who the suspect is. Another advantage of the line-up video that can be added to the list is that it provides a record of the line-up for the purposes of the trial and thus avoids frequent legal arguments about alleged police improprieties in conducting the line-up that

delay the processing of criminal cases through the courts. There can be no doubt that the video line-up (see below) will eventually replace live line-ups in many a jurisdiction as it has done in England and Wales, but do different identification test media produce different identification performance?

Turnbull and Thomson (1984)¹² compared the identification performance of subjects who witnessed an abrasive exchange between a lecturer and a stranger whose memory of the perpetrator was tested in target-present and target-absent conditions using either a live line-up or a photo-display. They found that in the target-present condition, there were no significant differences in identification accuracy. Similar findings had earlier been reported by Hilgendorf and Irving (1978) and Shepherd et al. (1982). Turnbull and Thomson, however, also found that in the target-absent condition, false identifications were three times higher in the photo-display than in the live line-up condition. Cutler et al. (1994) carried out a meta-analysis of eight studies comparing identification test media and found that the type of medium (live line-ups, videotaped line-ups, photo-arrays, slides and line drawings) produced comparable identification performances (p. 179). Consequently, they concluded that 'identifications from photoarrays should therefore not be given less weight in investigations or in trials than identifications from live line-ups. Another conclusion is that, given the apparent comparability of live line-ups and photo-arrays, it is not worth the trouble and expense to use live line-ups' (p. 181). Cutler et al. do remind their readers, however, that in deciding which identification test medium to use, one should take into account relevant legal provisions requiring, for example, that the suspect's legal counsel be present at any of them (Wells and Cutler, 1990).¹³ Cutler et al. do not, however, consider their meta-analytic findings the last word on the subject but urge future researchers to examine the effects of identification test media in field experiments that are forensically more relevant. Finally, on the basis that videotape technology allows faces to be blown up larger than life, persons to be shown in motion and a line-up to be shown repeatedly, the same authors maintain that 'it is conceivable that videotaped line-ups might improve identification accuracy rates in comparison to live line-ups'.

2 PERSON IDENTIFICATION FROM PHOTOGRAPHS

In western common law countries identification of a suspect by photograph is a lawful means of identification during a police investigation of a criminal offence or as an alternative when a suspect refuses to take part in an identification parade. The most commonly used photo identification procedure is one in which a witness identifies a suspect from a photo-board, comprising, in Victoria, Australia, for example, one photograph of the suspect and 11 others, such ordinary photographs (that is, not police ones) only showing facial features and which are, as much as possible, similar to the suspect's. Photo-board identification is used in criminal investigations when the identity of the suspect is not known and at the evidence-gathering stage when the suspect has been identified (*Alexander v. R*

(1981) 145 CLR 395). In England and Wales, if a suspect is identified by means of photographs shown to a witness in accordance with the provisions of PACE (1984) and Practice Code D, an identification parade or group or video identification should be held. Regarding subsequent use of photographs used to identify a suspect, drawing on Archbold (2008:14–44): the Crown should neither adduce evidence of, nor refer to, police photographs (see *R. v. Lamb*, 71 Cr.App.R. 198, CA); the prejudicial effect of adducing such evidence of bad character usually outweighs any probative value; and, finally, the prosecution might, contrary to normal practice, lead such evidence where the accused's criminal record has been adduced by the defence.

In England and Wales,¹⁴ under section 64A of PACE, a police officer may photograph a person and the photograph of a person who has been arrested may be taken at a police station only with his/her written consent (PACE, 1984: Code D para. 5) but, if certain criteria are met (see Code D para. 5.12A), it may be taken without their consent but force may not be used (Code D para. 5.21). Photographs of offenders known to the police are routinely kept at police stations and are used in local criminal investigations in an attempt to identify a culprit.¹⁵ In addition, within police forces there usually exists a criminal identification unit that keeps and updates state and national electronic databases of such photographs. A large proportion of them go back a number of years. Such photographs are carefully indexed and catalogued and kept in albums and are often also available on computers for police personnel and crime witnesses to search. Unlike witnesses in simulation or staged-event studies, actual witnesses to different crimes who look (browse?) through police photo albums of offenders known to the police can expect to encounter different numbers of offenders because different crimes have different clear-up rates. For some crimes, even taking age and gender into account, there will be hundreds and even thousands of photographs of potential suspects a witness to a crime such as robbery could be asked to look at in an attempt to select the culprit, whereas for other crimes, such as child arson, there will be at most a few dozen. In addition, the proportion of different ethnic groups in the community varies as does their involvement in different crimes, and there are fewer offenders known to the police with red hair, for example, because there are fewer such individuals among the population at large and there is no reason whatsoever why one should expect such individuals to be over-represented among offenders.

Identification from police photographs is admissible evidence in most jurisdictions even though defence attorneys might like to argue that such evidence should be inadmissible because it implies that the defendant has a criminal record (see *Bleakley* (1993) Crim. LR 203). On the basis that photographic evidence has its dangers from the defendant's point of view, trial judges in Britain, for example, are required by *Dodson* ((1984) 1 WLR 971) to warn the jury about such evidence.¹⁶ The following case (cited in Cutler and Penrod, 1995a) shows how eyewitnesses can make mistakes where photo identification is involved, with serious consequences for the innocent.

CASE STUDY

Witness photo misidentification

A blurred photograph of a robber in action was shown on television in an effort by police to apprehend the perpetrator of a number of bank robberies. Someone telephoned the police claiming the photograph shown was of Shaun Deckinga. Three bank-tellers who had been in the bank during one of the robberies identified him with confidence as the perpetrator, the jury believed the eyewitnesses and he was found guilty of two robberies. He protested his innocence but to no avail. The real robber, who had recently been released from prison, committed another almost identical robbery not long afterwards, while Deckinga was in custody. This time, however, the security camera photograph of him was clearer. A prison guard recognised the ex-prisoner robber by the name of Jerry Clapper, who was duly arrested and admitted having committed the bank robberies, including the two for which Deckinga had been convicted. Deckinga's conviction was quashed and he was released from prison.

In England and Wales, Annex E of the Code D of Practice provides some important safeguards against such misidentifications when a witness photograph identification takes place. In such a case: a police officer of the rank of sergeant and above shall be responsible for supervising and directing the showing of photographs to a witness; before a witness is shown photographs, the police officer assigned responsibility for supervising and showing of photographs must confirm that the first description of the suspect has been recorded and, if the supervising police officer is unable to confirm it, the showing of photographs is postponed (Annex E (a) (2)); only one witness shall be shown photos at any one time, the witness shall be shown no more than 12 photos at a time which shall, as far as possible, all be of a similar type; the witness shall be told that the photo of the person he saw may or may not be among the photos to be shown and if the witness cannot make a positive identification, they should say so (Annex E (a) (3–5)); if a witness makes a positive identification from photographs, unless the person identified is eliminated from the enquiries, other witnesses shall not be shown photos; the witness who has made identification from photos will be asked to attend an identification parade or group (see below) or video identification, if practicable. Finally, where a witness attending an identification parade has previously been shown photos or 'photo-fit' or 'identikit' or similar pictures, then the suspect and his/her solicitor must be informed of this before the identification parade takes place.

Showing eyewitnesses photographs of suspects before a line-up increases significantly the likelihood of false positive identifications.

Research into the use of mugshots has considered them mainly as an independent variable, a source of interference, with subsequent line-up identification accuracy as the dependent variable. Such studies have generally found that showing subjects photographs of suspects significantly increases the number of false positive identifications, that is, under these circumstances witnesses tend to mistake for the culprit someone whose face they have seen before a line-up and despite the fact that such a person was not present near the original incident.¹⁷ Such *unconscious transference* (UT) (originally a Freudian concept) is a by-product of a human memory that is dynamic, integrative and malleable (Loftus, 1974, 1976) but it means it is possible for a witness to misidentify a familiar but innocent person from a police line-up who is subsequently charged, tried, convicted and even sentenced to death and executed. As Ainsworth (2001) points out, ‘While examples of *unconscious transference* only occasionally come to light, it is difficult to establish the number of cases in which the phenomenon may have occurred’ (p. 242).

Ross et al. (1994b:80) cite a case that illustrates UT (see also Houts, 1963). A railway station ticket clerk was held up and picked a sailor from the police line-up believing him to be the armed robber who had victimised him. Fortunately, the sailor had an irrefutable alibi. The ticket clerk misidentified him because he lived near the station and had bought tickets from the clerk a few times before the robbery. It is interesting to note in this context that most identification experts surveyed by Kassin et al. (1989) felt the available empirical support for UT was good enough for an expert witness to testify about the phenomenon in court.

In fact, it turns out few researchers have concerned themselves with UT and they have reported mixed results (see Ross et al., 1994bc for a literature review). While two studies (Read et al., 1990, Experiments 1–4; Geiselman et al., 1996) have reported negative findings, most¹⁸ have reported positive findings.

Regarding theoretical approaches to UT, Ross et al. (1994b) identify the following three:

- 1 *Automatic processing* (Hasher and Zacks, 1979) that maintains the witness is not aware of having seen the bystander previously but the presence of the bystander in the line-up makes the witness’ unconscious memory of the bystander a familiar one and so predisposes him/her to misidentify.
- 2 *Source monitoring* (Lindsay, 1994) according to which, even though the witness remembers both the real offender and the bystander separately, he/she confuses the two because of some characteristic/s they have in common.
- 3 *Memory blending* (Ross et al., 1994b) posits that even though the witness remembers having encountered both the real offender and the bystander, he/she thinks they are the same individual.

In considering the empirical literature on UT it should also be remembered that support for it is weak and the studies concerned are low on ecological validity. Also, it would be most unusual for police to conduct a line-up that does not include

a crime suspect (Wells and Turtle, 1986). UT is undoubtedly an ‘intriguing and important topic’ (Ross et al. 1994b:99) but the available evidence indicates it is a rare phenomenon under simulated conditions and high self-monitors appear to be more vulnerable to it (Geiselman et al., 1996:207). Nevertheless, the policy implication of the limited evidence (that asking eyewitnesses to view mugshots interferes dangerously with a subsequent identification task) is that police should refrain from such a practice. Police investigators, however, cannot always decide in advance that a line-up will be conducted at a later stage in the investigation process.

An interesting empirical study by Ainsworth (2001) investigated one instance in which unconscious transference may occur, namely when the media show ‘photofits’ of suspects, as in the case study above. On 12 March 1993 the *Manchester Metro News* carried: (a) a photofit of a suspect in a serial assault case with the caption, ‘Sex monster: face of a fiend’ near it; and (b) an actual photograph of a Manchester man who had intervened to rescue a female who was being attacked, giving the name of the hero and the caption ‘Foiled attacker’. Using university students as subjects, Ainsworth found that the hero was incorrectly identified as a suspect a week later by almost half the subjects who were shown his photograph. It was also found that when subject witnesses were given a photo-array containing both the real suspect and an innocent bystander they were just as likely to pick either of them, providing some evidence for the existence of unconscious transference. The ecological validity of Ainsworth’s study is high because subjects were not told in advance that they would be asked to identify someone later and the identification took place a week later.

Regarding identification accuracy from mugshots, Laughery et al. (1971) found that the target’s photograph was more likely to be selected if presented after 50 other photographs rather than 125 photographs. In the light of this finding, Wells (1988:52) recommended that eyewitnesses should not be shown more than 50 photographs at a time. Wells’ recommendation is supported by the research finding that the greater the number of photographs a witness is asked to examine, the more likely it is that an incorrect identification will be made (Ellis et al., 1989). However, Wells’ recommendation is not practical from a police point of view because of the very large numbers of photographs of known offenders who may be potential suspects for a particular crime in a big city, and the various constraints and pressures under which criminal investigations are normally carried out. One practical solution suggested by Lindsay et al. (1994b) is for witnesses to sort faces by description. This would reduce the number of photographs of known offenders a witness would need to examine before coming across the target face (p. 128). As far as it has been possible to ascertain, despite some promising work by British researchers (see Ellis et al., 1989) and the existence of sophisticated video capture and retrieval procedures for recording the appearance of suspects (Davies, 1989, cited PROD – a system for picture recapture from optical disc – already in use with one police force in the UK at the time), there is a noticeable lack of studies

of suspect identification that would build on Ellis et al.'s work. This may well be explained by the fact that, as Lindsay et al. (1994b) reminded us, 'Further research is needed to determine the best method of sorting mugshots to improve eyewitness identifications' (p. 129).

It is often the case that police investigators do not know who the likely culprit/s of a crime might be and have to rely on the eyewitness for useful clues. In three interesting experiments Lindsay et al. (1994b) concluded that mugshots are a useful investigative tool in finding crime suspects by eliminating many innocent people. When used as an investigative tool, mugshots do not appear dangerous but do have a number of advantages: (a) since they are presented sequentially, they avoid witnesses making relative judgements; (b) they do not pose any potential dangers for innocent persons because they are not to be used as an identification technique; and (c) a witness can select more than one photo (p. 122). Ainsworth (2000a:172) points out two advantages of photo-spreads over line-ups, namely, that they may be considered more suitable for young witnesses or for particularly nervous individuals and they avoid a nervous witness being intimidated by the perpetrator's presence in a line-up. The danger in asking an eyewitness who has selected a suspect from a photo-array to pick out the suspect from a line-up is that if the wrong person is selected from the photo-array he/she is likely to be picked out in the line-up due to transference of familiarity (Deffenbacher et al., 2006). The witness who has identified someone from a mugshots array (comprising 8–15 mugshots) feels committed to that identification in a subsequent line-up. However, there was no adverse effect of showing photographs if a subsequent line-up did not include any of the people featuring in the photos shown to the witness. Furthermore, the eyewitness consistency in selecting the same suspect twice will probably be construed as direct evidence of guilt by the police who will proceed to apply for his/her detainment in custody even though the person is innocent. Research should pay more attention to pitfalls in police identification procedures by utilising computer technology that largely overcomes the limitations of using static pictures.

3 SHOW-UPS/WITNESS CONFRONTATIONS

The show-up identification procedure (that is, a one-person line-up) involves a witness being taken to a location where the suspect is expected to be or might appear and the witness is asked to point him/her out when he sees them. This evidentially-hazardous procedure was used by Melbourne detectives when a suspect was apprehended in close proximity to an attempted pharmacy robbery. They returned the suspect to the scene of the crime where he was seated in the back of an unmarked police car. The time of the attempted robbery was the first time the witness had seen the offender. A single confrontation identification was then held with the witness. However, as would have been expected (see below), at a

subsequent trial the identification evidence was ruled inadmissible on the basis that it involved a high risk of mistaken identification (*R v. Burchielli*, 1981, VR 611); to comply with the law of evidence relevant to identification the detectives should have conducted an identification parade with the suspect's consent.

Annex D of PACE (1984) provides that the following procedure shall be followed in England and Wales for confrontation by a witness:

- Before a confrontation takes place, the witness is told by the confrontation identification officer that the person he/she saw may or may not be the person they are to confront and, also, that they should say so if they cannot make a positive identification.
- Before a confrontation takes place, the suspect or his/her solicitor should be provided with details of the first description of the suspect provided by any witness who is to confront the suspect. Also, if it is practicable to do so and will not unreasonably delay the police investigation, the suspect or his/her solicitor should be provided with whatever material the police released to the media in order to identify the perpetrator.
- Force may not be used to make the subject visible to the witness. The Court of Appeal in *R. v. Jones and Nelson*,¹⁹ *The Times*, 21 April 1999, CA, held that neither reasonable force nor the threat of force may be used to bring about confrontation.
- Each witness should confront the suspect independently of other witnesses, friend or interpreter and should be asked 'Is this the person?' This is done in the presence of the suspect's solicitor, unless having the solicitor present would cause unreasonable delay to the police investigation.
- Normally, the confrontation should take place in a police station in a normal room or in one equipped with a mirror screen that enables the witness to see the suspect but not to be seen. If the confrontation is to take place in a room equipped with a screen, then the suspect's solicitor or friend or other appropriate adult is present or the confrontation is videotaped.
- If the police released to the media any material, such as video-films or photographs in order to identify the perpetrator, after the procedure the identification officer should ask each witness whether they have seen any films or photographs in the mass media or heard any broadcast regarding the crime in question and should record the witness' reply.

The Court of Appeal²⁰ in England and Wales, in *R v. Johnson* [1996] Crim.L.R. 504, CA held that if a victim is shown a video recording of the suspect close to the scene of the crime in time and place it effectively constitutes confrontation. It has also been held that before any confrontation with the suspect the police should make a note of the witness' description of the offender in order to be able to assess the possibility of auto-suggestion.²¹ Finally, evidence of a confrontation is not itself necessarily admissible simply because the defence has insisted on it.²²



CASE STUDY

The *Rogers* case

The case of *Rogers* (1993) Crim. LR 386) provides a British example of the use made by police of show-ups. Two witnesses reported to police seeing a person damaging cars; they tackled him and noticed he had slurred speech. Upon investigating the matter, the police found a person whose speech was slurred sleeping inside an industrial unit. The two witnesses attended and, through a window, recognised the person concerned. Clothing found in the defendant's car was also recognised by the same two witnesses as the same as that worn by the defendant earlier. The defence appealed against conviction on the grounds that the identification was inadmissible because it had not been carried out in accordance with the Code of Practice provided by PACE (1984). The Court of Appeal dismissed the appeal on the grounds that it was not uncommon for the police to take a witness to attempt to identify a suspect and, also, it would have been rather difficult for the police to justify the arrest before having the defendant identified by witnesses. As the Court of Appeal put it: 'It would make criminal investigations of this sort quite impossible if the police had to arrest everybody who might answer the description, and arrange an identification parade thereafter'. One-person show-ups are also frequently offered as evidence that a suspect is indeed the perpetrator of the crime (that is, that he/she is guilty) in the Netherlands (Wagenaar and Veefkind, 1992:274).

The in-court (dock) identification of the defendant is required in all cases. In most cases, dock identification is supported by out-of-court identification. In a small percentage of cases, however, dock identification of the defendant may be the only identification by a witness. In such cases dock identification is not an adequate form of identification unless the witness previously knew the defendant. In the British case of *Thomas* ((1994) Crim. LR 128) a shopkeeper who had been the victim of a robbery first recognised the defendant in a group identification. Another shopkeeper did not recognise the defendant in the group identification but subsequently identified him in court when giving evidence in the dock. The trial judge told the jury that dock identifications are very rare for they are believed to be unfair but failed to also point out that the defendant may well have been recognised by the shopkeepers as a result of unconscious transference. The conviction was overturned on appeal on the grounds the judge's warning to the jury was insufficient.

Drawing on Archbold (2008:14–42), even though it has been held that dock identification is not incompatible with a fair trial and the judge has discretion to allow it, the practice of allowing the witness to identify the defendant for the

first time in the dock is undesirable (see *R v. Cartwright*, 10 Cr.App.R 219, CA) and seriously irregular (*R v. Edwards* (2006) 150 S.J.5700 PC). Allowing dock identification would be acceptable if the defendant has declined a formal request to attend a line-up and, also, if as a result of the defendant's lack of cooperation with the police, no other identification procedure has been possible. If a witness volunteers a dock identification, the judge should make it clear when summing up that the proper procedure is the identification parade and urge caution. Finally, serious constraints on dock identification do appear to apply in summary trials in which such identification can be sought and relied upon by the prosecution (*Barnes v. Chief Constable of Durham* [1997] 2 Cr.App.R. 505, DC).

In a number of cases the US Supreme Court has held that while there are more substantial risks of bias in show-ups than in line-ups (see *Stoval v. Denno* (1967) 388 US 293), the admissibility of such evidence is decided by considering not so much whether the show-up was necessary but by considering the circumstances affecting the likely accuracy of the identification (Gonzalez et al., 1993:526). In the case of *Neil v. Biggers* ((1972) 409 US 188), the Supreme Court considered an appeal against conviction in a rape case in which the victim identified her assailant in a show-up seven months after the crime on the grounds that she had spent 'up to half an hour' with the defendant, she had been under a great deal of stress, she was very confident and had not identified anyone else in another identification procedure (Gonzalez et al., 1993:526). According to Gonzalez et al., in *Manson v. Braithwaite* ((1977) 432 US 98), however, the Supreme Court reaffirmed its view that the acceptability of any identification procedure must be evaluated on the basis of the totality of the circumstances surrounding it. Not surprisingly, therefore: 'The police are the strongest proponents of show-ups, and their argument is largely practical' (Gonzalez et al., 1993:525). Interestingly enough, however, Kassir et al.'s (1989) survey of eyewitness testimony experts in the United States found that most of them (78 per cent) agreed that 'the use of a one-person show-up instead of a full line-up increases the risk of misidentification' and the majority (65 per cent) were of the view that there was reliable or very reliable evidence for that position.

The concern of opponents of the use of show-ups²³ is based on the belief that they are significantly more likely to lead to false identifications than line-ups because they are far more suggestive (Wells, 2001). Malpass and Devine (1983:85) argued that the fairness of line-ups lies in that, compared to show-ups, they distribute the probability of identification of an innocent suspect across the line-up foils, reducing the identification error risk. According to Gonzalez et al. (1993), witnesses exercise greater caution because of the presence of foils in a line-up and this is another argument against show-ups (p. 527). Gonzalez et al. maintain, however, that show-ups and line-ups involve different decision-making strategies, with line-ups requiring 'comparative, relative strategies because the witness selects from several alternatives', whereas show-ups call for absolute strategies because the witness must decide if the suspect is the perpetrator or not (p. 527). This argument leads

the same authors to predict that show-ups are characterised by a higher frequency of 'no' responses. Another concern goes beyond the show-ups vs line-ups accuracy identification comparison and has to do with the finding that if a witness takes part in a show-up, it will significantly increase the chances of a mistaken identification in a subsequent line-up (Dickinson et al., 2004).²⁴ But, does the weight of the empirical evidence support the concern of opponents of police use of show-ups – that they lead to witnesses making significantly more positive (and especially false) identifications than in line-ups?

Wagenaar and Veeffkind (1992) compared witness-identification accuracy and false identifications in two experiments. In the first, they used colour slides and the number of foils in the colour picture line-ups was 1, 2, 6 or 10; the subjects were visitors to the University of Leyden in the Netherlands whose age varied from 6–75 who were run in groups of 25 or 50, and the retention interval was 20 minutes. In a second experiment Wagenaar and Veeffkind staged a relatively harmless but still violent event in front of a class of psychology undergraduates and compared photographic show-ups and six-person line-ups. Wagenaar and Veeffkind concluded their results showed there is no strong argument for preferring a ten-person over a six-person line-up and that 'one-person line-ups are to be avoided as they increase the likelihood of false identifications' (p. 283). Finally, they consider it a matter of major concern that witnesses' performance was found to be of such low absolute level – at best it was 5 per cent false identifications in their second experiment. As for their overall assessment of show-up accuracy, they reported that show-ups should be considered an 'unsafe practice' (p. 284).

Gonzalez et al. (1993) also compared identification performance in show-ups and line-ups. In one experiment (a staged theft in front of a class) they compared a live show-up and a live line-up, while in another both identifications procedures were carried out using photographs. They also analysed data on 172 actual live show-ups and 50 actual photo line-ups provided by a police detective. Gonzalez et al. allowed their experimental subjects the option of an 'I can't remember' response in addition to whether they recognised the target person. It was found that, contrary to what opponents of show-ups would have predicted, in both photographic and live identification procedures witnesses were more cautious in making an identification in a show-up than in a line-up; in other words, one-person line-ups are no more suggestive than many-person line-ups. Gonzalez et al. concluded that 'police pressure on the witness to make an identification may be considerably less in the typical show-up than in the typical line-up'. The conflicting findings reported by Wagenaar and Veeffkind (1992) and Gonzalez et al. (1993) may well reflect differences in the events staged and/or the subjects used and/or the length of the retention period used or, finally, the fact that the subjects in the Gonzalez et al. study had the option of responding with 'I don't remember'. Regarding the retention period variable in such studies, according to Yarmey et al. (1994), a short period of time (30 minutes or less) between the time an incident takes place and a show-up confrontation has been stated by the courts in the United States

as contributing to accuracy identification (*People v. Brnja*, 1980; *Singletary v. United States*, 1978) (p. 454). Of course, a live line-up would take the police a day or more to arrange after an offence has been committed.

A Canadian study by Yarmey et al. (1994) used a five-minute retention period in a field study that compared face and voice recognition in which 651 members of the public took part in one-person show-ups and 169 others did so in six-person line-ups. A female researcher approached a member of the public and asked for directions. A few minutes later researchers would ask that same person to participate in the research by taking part in a test. It was found that, taking into account guessing (which was not included by either Wagenaar and Veeffkind, 1992, or Gonzalez et al., 1993), witnesses were more likely to identify a target in a six-person visual line-up than in a show-up. In fact, accuracy in show-ups was little better than chance. Finally, there were no significant differences in the false identification rate in the two procedures. Lest this last finding encourage supporters of show-ups to conclude that they do not lead to more false identification of innocent suspects than do many-person line-ups, Yarmey et al. (1994:461) repeat the advice of Wells (1993) that this finding 'should not be interpreted as a green light for the use of show-ups'.

Behrman and Davey (2001) reported a study of eyewitness identification in actual police cases which compared suspect identification rates (SI) for 258 field show-ups and 289 photographic line-ups. SI rates were significantly greater for field show-ups (76 per cent) than for photographic line-ups (48 per cent). In addition, the SI rates for field show-ups did not vary as a function of eyewitness conditions. However, Dekle (2006) had subjects witness a mock crime, view a composite of the perpetrator and then attempt identification of the offender and found no evidence that show-ups are a less accurate identification procedure than line-ups. Finally, Steblay et al.'s (2003) meta-analysis compared identification accuracy rates in show-ups and line-ups utilising eight papers and found that: (a) show-ups yielded lower choosing rates than line-ups; (b) correct identification was about the same for show-ups and line-ups in target-present while in target-absent conditions show-ups participants are significantly more likely to reject correctly; and, finally, (c) if an innocent suspect resembles the culprit, false identifications are significantly higher in show-ups. In conclusion, the laboratory evidence considered indicates that a line-up should be preferred to a show-up because of a lesser chance of false identification due to the presence of foils in the former. However, the findings from studies of actual live show-ups indicate that show-ups have higher identification accuracy than photographic line-ups. A relevant factor in this context is that in real cases, unlike line-ups that could take up to one week or even more, show-ups are conducted immediately after (for example, within three hours) an offence has been committed. Despite this knowledge, laboratory studies have tested identification accuracy for show-ups and line-ups after the same retention interval. When this factor is taken into account show-ups yield greater accuracy rates. Unfortunately,

Evidence in actual police cases indicates that show-ups have a higher identification accuracy than photographic line-ups.

the Steblay et al. (2003) meta-analysis failed to concern itself sufficiently with the ecological validity of the laboratory studies they have examined. One again, it can be seen that laboratory studies of show-ups low on ecological validity most probably exaggerate the risk of false witness identification. Researchers in this area would do well to familiarise themselves with suspect identification procedures and field conditions before designing experiments to determine witness identification accuracy, ensuring that their simulations are high on ecological validity.

4 GROUP IDENTIFICATION

In England and Wales, Code D of the *Police and Criminal Evidence Act 1984* (Annex C) provides for a group identification procedure that is meant to 'ensure as far as possible, group identifications follow the principles and procedures for identification parades so that the conditions are fair to the suspect in the way they test the witness' ability to make an identification' (see Archbold, 2008:14–38 for details). Annex C provides that: group identifications may take place either with the suspect's consent and cooperation or without their consent; witnesses observe the group one at a time and, before they are asked to look at the group, they are told the person they saw may or may not be in the group and, also, if they cannot make a positive identification they should say so; provisions are listed for *moving group identification* (that is, when the group in which the suspect will appear is moving, as when leaving an escalator) and *stationary groups* as when people are waiting in a queue. Paragraph 37 of Annex C states that group identifications should only take place in police stations for safety, security or because it is not practicable to do so elsewhere. Provisions are also made (paras 40–1) for group identifications involving prison inmates, which may only take place in the prison or at a police station. In the case of *R v. Jamel* ([1993] Crim L.R. 52, CA), it was held that a group identification could be faulted if it was arranged in a street where there was no reasonable likelihood of finding anyone who looked like the suspect (Archbold, 2008:14–38). Also, a suspect has no statutory right to demand a group identification (ibid 14–38). Regarding *covert group identifications* (that is, without the suspect's consent), they are provided in paras 34–35 when a suspect has refused to cooperate in a group identification. In such a case, the suspect has no right to have a solicitor, appropriate adult or friend present, as when the group identification takes place with the suspect's consent.

5 IDENTIFICATION PARADES/LINE-UPS

Police use biased line-ups due to one or more of the following reasons (Lindsay, 1994b): ignorance, sloppiness and intentional bias (p. 183). In a series of experiments Lindsay found that lack of special training in line-up construction, a belief that the suspect is guilty or a wish to lead a witness to identify the suspect, result in

foils (distractors) being selected that resemble the suspect in appearance (see below). Lindsay also reported that conversations he had with police officers subsequent to completing the research concerned, confirmed his belief that ‘highly biased line-ups are the result of intentional actions by the police’ (p. 198). He also pointed out, however, that his criticism applies to a very small proportion of police officers who engage ‘in outrageously unprofessional behaviour’.

It would appear that, as a proportion of criminal cases investigated annually, live line-ups are seldom used by police investigators in western English-speaking countries. As far as it has been possible to ascertain, police forces in Britain, Australia, New Zealand, Canada and the United States do not routinely keep and publish statistics on the use made of live line-ups and it is thus impossible to be precise about the percentage and type of criminal investigations that involve this particular identification procedure, let alone how frequently correct identification is made. For such data we need to turn to studies of line-up accuracy in real cases (see below). Without wishing to downplay the seriousness of witness misidentification and the conviction of innocent suspects, the reader should note that psychologists’ exclusive focus on misidentification of innocent suspects in line-up identification and the presentation of this phenomenon in a somewhat stereotypical way against a background of over-typical situations most probably distorts the picture, for there is generally a failure on the part of researchers to locate the issue of misidentification in a broad psycholegal context. Consequently, some police investigators would, understandably, argue that eyewitnesses have been given a bad reputation that is not justified by their accuracy performance in actual cases. The need to also know about the incidence and factors underpinning accurate witness identification with different identification procedures cannot be over-emphasised. Psychologists need to balance a concern for the innocent suspect with fairness towards crime victims and the police.

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In recent years, increasing concern about the unreliability of evidence identification can be seen in the close scrutiny with which the courts treat such evidence. Line-up identification evidence is a case in point. Police can be criticised for the way they conduct line-ups as well as for failing to hold a line-up. As in other countries, there is no rule of law in Australia and in Britain that there must be a police identification parade for the purpose of identification (*R v. Preston* (1961), VR 762).²⁵ However, the courts have indicated that visual identification of an accused should take the form of an identification parade (line-up). The exceptions are where the offender is well-known to the witness (*Davies and Goody v. R* (1937) Crim. LR 181) or if the accused does not consent to an identification parade (*R v. Clune* (1982) VR 1). In addition, a suspect him/herself may request an identification parade and/or ask for a lawyer or a friend to be present and police standing orders in some jurisdictions provide for such requests. Police

Increasing concern about the unreliability of evidence identification can be seen in the close scrutiny with which the courts treat such evidence.

officers in some countries are provided with detailed instructions in how to conduct identification parades as well as other types of identification procedures.

In England and Wales, Annex B of PACE (1984) provides detailed guidelines on all aspects of conducting a line-up. In view of their importance, most of the guidelines will be listed: at least eight people in addition to the suspect who, as far as possible, resemble the suspect in height, general appearance and position in life; an identification officer; affording a suspect reasonable time to have a solicitor or friend or interpreter present; that the line-up can take place in a normal room or one with a screen permitting a witness to see the line-up without being seen; for providing the suspect or his/her solicitor with the witness' first description of the witness and with any material the police released to the media in connection with the suspect in the case under investigation; reminding the suspect of the procedures governing the conduct of line-ups and cautioning the suspect as provided before the line-up identification commences; steps must be taken to conceal the location of any unusual physical feature (for example, a tattoo or scar, distinctive hairstyle, etc.) that cannot be replicated on other members of the identification parade;²⁶ and, similarly, identifying numbers or insignia or other identifying badges should be concealed if police officers in uniform form the parade; including only one suspect in a parade unless there are two suspects of roughly similar appearance, in which case they should be paraded together with 12 other people; no more than two suspects can be in the line-up; different parades shall comprise different members; asking the suspect if he/she has any objections to the line-up and, where practicable, the identification officer should remove the suspect's grounds for objection; the suspect selecting his/her own position in the line-up and, after each witness leaves the room, the suspect can change position; preventing any contact between witnesses and between a witness and the suspect or the line-up members before or after the parade; the identification officer shall not discuss the line-up or a previous witness with a witness; only one witness at a time inspects the parade and just before doing so is told by the identification officer that the person he/she saw may or may not be on the parade and if they cannot make a positive identification they should say so and should only make a decision after seeing all members of the line-up at least once; the witness may request that a member of the line-up speak, or move or adopt a specified posture; if anyone is asked to leave the identification parade because they are interfering with its conduct, the circumstances should be recorded; and, finally, that the line-up should normally be videotaped and, if that is impracticable, photographed in colour.

Many of the recommendations made by the Wells et al. (1998) panel of experts to improve the conducting of line-ups in the United States have become part of police witness identification procedures in England and Wales.

As far as determining the admissibility of identification parade evidence is concerned, in *R v. Martin and Nicholls* ([1994] Crim. LR 218), the court stated that a *voir dire* would be rare and, in general, the judge should decide upon depositions, statements and submissions of counsel (Archbold, 2008:14–35). It should also be noted in this context that a *Forbes*²⁷ direction should ordinarily be given to the jury where there has been a failure to hold a required identification

procedure; more specifically, the jury should be told that, in assessing the whole of the case, they should consider and give the weight they see fit to the fact that the defendant had not been afforded the safeguard of putting the eyewitness' identification to the test. In *Alexander v. R* ((1981) ALR1, at 34), the High Court of Australia held that an identification parade is the best and fairest method of obtaining evidence of identification of suspects by witnesses. Such parades normally comprise a number of persons (eight or more in Australia and in the UK) of the same sex as the accused being lined-up, and with the accused placed among them, to be viewed by the witness who will decide whether the offender they saw in a previous incident is one of them. According to Wells et al. (1994:225), line-ups are conducted 'because verbal descriptions do not contain a level of information that allows us to definitely decide whether our suspect is the suspect or not'. This proposition is consistent with the empirical evidence showing little statistical relationship between such measures of verbal recall as accuracy, completeness, consistency and fluency and accuracy of witness recognition performance (Pigott and Brigham, 1985).²⁸

A parade may occasionally involve a witness being asked to identify an object used in the commission of a crime, such as vehicles, premises, firearms and other weapons, tools or instruments or clothing (*R v. Hickin and others* (1996) Crim. LR. 584, CA) or other physical objects or even an animal. The same legal principles apply to both person and object identification parades (*R v. Turnbull* (1976) WLR 445). Interestingly, the experimental psychological literature on line-ups has been exclusively concerned with person identification. From the court's point of view, the line-up is used to make certain that the ability of the witness to recognise the suspect or an object has been fairly and adequately tested. In most countries such parades are normally conducted at police stations for a number of reasons but occasionally there is a need to do so elsewhere, including inside a prison. In addition to providing identification evidence for the courts, identification parades can also be used by police investigators to eliminate a suspect from an investigation early on or to put pressure on a suspect to confess. In view of the fact that photo-board identification may be prejudicial to the accused and its use prior to a line-up may result in unconscious transference, a line-up is, therefore, generally preferred to photo identification since a line-up also means the accused is present and in a position to comment on its fairness. A line-up rather than photo identification should be used at the evidence-gathering stage.

The existing empirical literature (see Brewer et al., 2005; Valentine, 2008; Wells et al., 2006 for literature reviews) has identified a range of factors that contribute to biases in line-up procedures, which result in apparently alarmingly high rates of false identifications. In common law countries alleged offenders are presumed innocent until proven guilty in a court of law or until they, of their own volition, decide to plead guilty. Consequently, biased line-ups are just not acceptable. As mentioned in chapter 7, the calling of an experimental psychologist to give expert evidence regarding the unreliability of identification evidence is not permitted in Australia (*R v. Smith* (1987) VR 907; (1990) 64 ALJR 588). Drawing on Freckelton and

Selby's (2005) excellent work on the expert witness, expert evidence on eyewitness identification may not be given in the United States (*Dyas v. United States* 376 A 2d 827 (DC 1977); *Nelson v. State* 362 So 2d 10107 (Fla 1978); *United States v. Amaral* 488 F 2d 1148), and in Canada (see *R v. Audy* (No.2) (1977) 34 CCC (2d) 231). As far as voice recognition is concerned, in Australia in *R v. Harris* (No.3) [1990] VR 310, Ormiston, J held that voice recognition was not an area in which only experts could give evidence (Freckelton and Selby, 2005:66). But what is meant by a 'fair' line-up? Wells et al. (1993) offer the following definition: 'A good line-up task is one that minimises the likelihood that an innocent suspect will be (falsely) identified and maximises the likelihood that a guilty suspect will be (accurately) identified' (p. 835). There is, however, disagreement as to whether the distractors/foils should resemble the suspect or match the eyewitness' description of the suspect (see below).

Before considering empirical evidence pertaining to sources of bias in identification performance, it is important to note that many of the studies concerned can be said to be low on external validity because they have used young students as subjects and, also, as Ainsworth (2000a) rightly argues:

Although laboratory-based research studies examining identification procedures have been helpful in many areas, they are unable to replicate the tension which a real suspect [and witness] on a real identification parade might experience. For this reason, it is not easy to call upon reliable research evidence to establish the extent to which wrongly accused suspects can be picked out as guilty (p. 173).

The reader should note that many simulation studies of line-up identification accuracy have misused the term 'false identification'. This is partly because of a certain amount of conceptual confusion about the meaning of the terms 'culprit', 'suspect' and 'distractor/foil', which appears to have led so many identification evidence researchers to confuse all three or two of these three terms. By definition, a standard police line-up includes a suspect. The suspect who, of course, may be innocent, is suspected of being the culprit of the crime. Positive identification of the suspect has serious consequences. A distractor/foil is innocent and if the witness selects a distractor it has no consequences (Wells et al., 1994:227). In the same context, a distinction also needs to be made between 'false identification' and 'identification error' by a witness. Wells et al. (1994:228) 'reserve the term false identification for instances in which the eyewitness identifies an innocent suspect; if the eyewitness identifies a distractor we call this a foil identification or distractor identification', and 'a false identification cannot occur when the actual culprit is a member of the line-up' (p. 228). Often researchers are actually reporting distractor identifications that are of no real significance in real life other than as a source of police frustration and disappointment. High rates of false identifications in the target-present condition have seldom been reported. In a real line-up, of course, a witness has no way of knowing for certain whether the one the police

suspect of committing the crime is in fact the culprit. The distinctions made by Wells et al. (1994) have implications for how one decides the similarity between the suspect and the foils. What should be emphasised in this context is the need for eyewitness identification researchers to carry out laboratory as well as field studies because the two methods supplement one another and both are necessary to have a much clearer picture, for example, of line-up identifications. Of course, the type of suspect identification research carried out reflects the procedures that are followed in different countries. In North America police routinely show witnesses a total of six photos in an array of two rows of three. Traditionally, in the United Kingdom, suspect identification has comprised at least eight look-alikes and the suspect. Recently, however, British police forces have been using video identification parade electronic recording (VIPER) that presents moving line-up images on video. Police forces in Australia are using a similar solution to line-up administrator bias (see below). MacLin et al. (2005) have reported a laboratory study to assess whether *PC-Eyewitness* (a computerised line-up administration tool) is an effective means of gathering eyewitness identification data. They carried out two experiments (with 160 students participating in each experiment) to replicate the results of previous studies comparing simultaneous and sequential line-ups. In the second experiment the line-ups were presented by *PC-Eyewitness*. MacLin et al. compared the results they obtained to the results reported by Steblay et al. (2003) in their meta-analytic study and concluded that computerised line-up administration using *PC-Eyewitness* is an effective means for obtaining eyewitness identification data.

Line-up Accuracy in Real Cases

Behrman and Davey (2001) carried out analysis of archival data pertaining to 289 photographic line-ups and reported that, overall, close to half (48 per cent) of the witnesses identified the suspect but the accuracy rate was 64 per cent if the line-up was conducted within seven days of the event and 33 per cent if the time delay was eight days or more. Of course, one weakness of archival studies is that it is not certain how many line-ups contained the actual offender. Analysis of archival data on 58 line-ups in criminal cases in the United States revealed that the witness identified the suspect in 50 per cent of cases, a foil in 24 per cent and no identification was made in 26 per cent (Behrman and Davey, 2001). In one of the early studies of line-up accuracy in real cases in Britain, Wright and McDaid (1996) analysed data on a sample of 1561 identification parades held in London in 1992 and found that 39 per cent of the witnesses picked the suspect, 20 per cent picked a foil and no less than 41 per cent did not make a selection. There is undoubtedly a need for more such studies. Considering additional studies of live line-up accuracy in Britain (see Pike et al., 2002; Slater, 1994; Valentine et al., 2003), the accuracy rate turns out to be 40 per cent, no identification made (40 per cent) and, despite witnesses having been warned as provided by PACE, identifying an innocent foil

(20 per cent). Valentine et al. (2003) analysed police archival data from over 300 live identification parades conducted by the Metropolitan Police in London that involved about 600 witnesses. They found that the suspect identification rate was 65 per cent within seven days on the incident and 38 per cent for time delays of eight days or more. Valentine et al. also found that the suspect was more likely to be identified if: the witness was aged under 30 years of age; the suspect was white European (rather than African–Caribbean); the witness observed for more than one minute; the witness gave a detailed description; and, finally, if the witness made a fast decision at the identification parade. One possible explanation for the increased probability of suspect identification if the suspect is aged under 30 years of age is the fact that most offenders who are prosecuted by the police in Britain are under 30 years of age; in other words, the finding reported by Valentine et al. (2003) supports the same-age identification bias phenomenon. In contrast to the finding of studies discussed in chapter 2 and in support of eyewitness studies of real-life cases and of Behrman and Davey (2001), Valentine et al. (2003) found no evidence for a *weapon effect*. Regarding the race of the suspect, Behrman and Davey found evidence in support of the same-race identification accuracy bias, with suspect identification rate at 60 per cent, but 45 per cent for between-race line-up identifications. However, neither Pike et al. (2002) nor Valentine et al. (2003) found evidence for same-race identification bias. Future archival research should examine line-up accuracy, controlling for such relevant factors as retention interval, age, gender and race of the suspect and the witness and type of crime involved.

Video Line-up Identification

In England and Wales, Annex A of Code D of PACE (1984) provides for video line-up identification and also, that: an identification officer who is responsible for arranging the images to be used in a video identification but who has no direct involvement in the case; the set of images must include the suspect and at least eight other people who resemble the suspect in age, general appearance and position in life; video identification is subject to the same procedures and safeguards as a live identification parade (see above), including ensuring that witnesses do not communicate with each other about the case before they see the set of images; once the witness has seen the whole set of images twice and has indicated they do not want to view the images, or any part of them again, the witness should be asked to say whether the person they saw themselves on a specified earlier occasion has been shown and, if so, to identify by number of the image, and the witness will then be shown the image to confirm the identification. In *R v. Marcus* [2005] Crim.LR. 384, CA, the suspect consented to video identification procedure with certain parts of the faces of all images concealed. The police, however, conducted a parallel procedure without any parts obscured, thus making the defendant stand out. The evidence was deemed unfair and should have been excluded (Archbold, 2008:14–33e).

Since 2003 in England and Wales video line-ups have been used, replacing, in effect, live identification parades. The 15-second video presents sequentially a shot of each line-up member's head and shoulders, first looking at the camera, then the head is rotated to show both profiles and, finally looking at the camera again. Each line-up member's image has an identifying digit at the top. But how fair are video line-ups? A video line-up would be fair if a mock witness who has not seen the perpetrator is given the original eyewitness description of the suspect and picks the suspect only out of the nine (that is, 11 per cent). A study of fairness of live identification parades and video line-ups by Valentine and Heaton (1999) reported that mock witnesses picked the suspect 15 per cent in video line-up and 25 per cent in live identification parade. A later study by Valentine et al. (2003) used an equal number of mock witnesses for both ethnic backgrounds and found that live identification parades and video line-ups were equally fair towards African-Caribbean and white Europeans.

Sources of Bias: Police Practices, Knowledge, Attitudes and Intentions

The composition of the line-up

A basic proposition by Wells et al. (1994:225) in the context of their numerous constructive recommendations on how to properly conduct line-up identifications, is that: 'The purpose of a line-up is to uncover information in an eyewitness' recognition memory that was not available in recall'. Line-ups can differ in terms of their size (see below) as well as the extent of similarity between the suspect and the foils. In the typical line-up procedure used in Britain, Australia and New Zealand, for example, a suspect is included in a line together with seven foils (innocent distractors) side-by-side and the suspect can choose his or her position in the line. The witness gets to view the line-up simultaneously. As Thomson (1995a:143) pointed out: 'the standard method of identification parades is not unlike multiple-choice exam questions'. Such a procedure, of course, means that there is scope for each foil to somehow let the witness know that they are not the suspect and, if for some reason, all or some of the foils know who the suspect is, the potential is there for them to communicate that knowledge to the witness in a subtle way, whether consciously or unconsciously (Thomson, 1995a).

A line-up may be unfair, biased or suggestive when one person stands out from the rest in such a way that anyone equipped with the original verbal description given by the witness can pick him/her out irrespective of whether they were present at the scene of the crime (Clifford, 1981:25). A person could stand out in a line-up because of the colour of their hair, their ethnic background, their clothing (especially if one of the line-up members happens to be wearing clothes similar to those worn by the offender when seen by the witness) or because other line-up members are not standing close to a particular person or they keep looking at him (Lloyd-Bostock, 1988:14).

CASE STUDY

A horrifying photographic line-up to identify unfamiliar people

In a keynote presentation at the 2008 European Association of Psychology and Law Conference in Maastricht, in the Netherlands, the well-known Dutch psychologist Professor Willem A. Wagenaar described problems in the identification procedures used at the International Criminal Tribunal for the Former Yugoslavia. To take one example, Ramush Haradinaj was among those accused of war crimes. For witnesses to identify him, photographic line-ups were made containing the accused and seven foils. The line-ups were made available to all investigators and all witnesses were shown the same line-ups. The line-up administrator always knew who the suspect was in the line-up. The foils were chosen on the basis of common features such as age, uniform, beards or moustaches. Thus, 'a perpetrator described as having a beard could be presented in the lineup without a beard, just because there was no other picture available', and, 'Many witnesses were not even asked to give a description of the perpetrator' (p. 6). Finally, the foils were also combatants from one of the armies fighting in the conflict, could have been known to witnesses and may well have been involved in war crimes themselves. In fact, one former soldier in one of the armies knew all the foils. For Wagenaar (2008): 'All these shortcomings lead to the horrifying conclusion that in the investigation of war crimes, with hundreds of thousands of victims, identification is simultaneously the most important and the most neglected issue' (p. 7).

The look-alike foils can be chosen on the basis of the witness' description known, as 'match-to-description', or finding fillers who match the suspect in terms of age, race and hairstyle, for example, on the basis of match-to-suspect. In Britain and Australia, line-ups (until recently most of them live ones) have been presented simultaneously. We saw in chapters 2 to 4 that police investigators should expect that eyewitnesses will often only be able to furnish them with incomplete and inaccurate descriptions of culprits. If the police use the witness descriptions to select the foils it will probably mean that in a number of cases they will not be very similar in appearance to the person the police suspect. In Britain, however, whatever the description given by a witness, as we saw above, Code of Practice D (*Police and Criminal Evidence Act 1984*) specifically states that the members of a line-up selected by the police must, 'as far as possible resemble the suspect in age, height, general appearance and position in life' (cited by McKenzie, 1995). In the case of *Quinn* (*Times*, 15 March 1994) Lord Taylor, CJ, stated that the idea is not to produce a line-up comprising seven clones of the suspect (cited in McKenzie, 1995:203).

Psychologists have examined the impact on identification performance of the degree of similarity between the target and foils in a line-up as well as whether the choice of foils should be on the basis of the description given by a witness (Luus and Wells, 1991; Wells et al., 1993) or on the basis of what the target person looks like (Doob and Kirschenbaum, 1973; Wells et al., 1979). Discussion of line-up composition issues inevitably raises the question of what is meant by a 'good distractor'. Wells et al. (1994:226) offers the following definition: 'a good distractor is one who fits the verbal description but varies in appearance from the suspect on features that were not part of that description'. Wells et al. (1993) accept that a high degree of similarity between suspect and foils provides effective protection against witnesses selecting an innocent suspect but they maintain that the protection afforded has its price – 'a loss in accurate identifications' (p. 836). Wells et al. suggest that selecting foils on the basis of the witness' description of the suspect protects innocent suspects from being selected by witnesses. A comparison of the two approaches to selecting line-up foils by Wells et al. (1993) found that the match-to-description strategy produced both a low rate of false identifications and a high rate of accurate identifications. Kneller and Stevenage (2000), too, found that when the line-up is presented sequentially the match-to-description method of line-up construction produced a greater accuracy rate (70.8 per cent) than the similarity-to-suspect method (44.4 per cent). In support of earlier studies, Clark and Tunnicliff (2001) have also replicated the higher accuracy of the match-to-description finding and have pointed out that this result suggests that false identification rates in previous experiments would have been higher if the foils had been selected based on their match to the innocent suspect, rather than the absent perpetrator. The weight of the evidence favours the match-to-description strategy as far as selecting line-up fillers is concerned. However, for Brewer et al. (2005:201) the issue of match-to-description vs match-to-suspect remains to be resolved.

Similarity between the suspect and the foils in a line-up is one of the aspects of line-up fairness suggested by Malpass and Devine (1983:221), the other being line-up size. What, then, can psychologists tell lawyers about the impact of similarity between the suspect and foils in a line-up on identification performance? One intriguing finding reported by Lindsay (1994a) from mock-jury research (see Lindsay and Wells, 1980) suggests that potential jurors: do not consider line-up procedures as being of any great importance in determining witness accuracy; they are more convinced by more biased line-ups (foils similar to suspect) and appear impervious to expert testimony, if not negatively influenced by it! These perplexing findings definitely warrant further attention by legal psychologists interested in reducing the number of innocent people who get convicted.

Undergraduates who saw a staged theft take place in front of them were subsequently asked to identify the thief by Lindsay and Wells (1980), who manipulated degree of similarity by varying the racial composition of the foils (all whites or three whites and two Asians) in a target-present/target-absent six-person photo-array. Subjects made the most correct identifications in the low-similarity target-present condition. It was also found that both correct and false identifications were low in

the high-similarity condition. Finally, in the low-similarity target-absent condition subjects made significantly more false identifications.

In their efforts to apprehend offenders the police sometimes broadcast eye-witnesses' descriptions of suspects. Such descriptions normally include details of *clothing* worn at the time a crime was committed. But, is clothing important in the context of line-ups? Lindsay et al. (1987) reported that when a perpetrator is in the line-up, the degree of similarity in terms of clothing worn between the suspect and the foils does not influence the number of correct identifications but does lead to significantly less false identifications if foils are dressed in exactly the same clothes as the perpetrator. The practice used by police forces in Australia and Britain is for foils to be dressed in order to look like the perpetrator. However, while this practice may discourage witnesses from identifying suspects by deduction (and one could also argue it can therefore be said to protect suspects' right to a fair line-up), it makes it unduly difficult to identify the suspect (Wells, 1993). Consequently, Wells warns against using line-ups consisting of look-alike foils and suspect.

The size of the line-up

The size of a line-up is one of the two aspects of line-up fairness proposed by Malpass and Devine (1983). Interestingly, however, as Wagenaar and Veeffkind (1992:277) pointed out, 'Few countries prescribe the number of foils by law, but in practice a number around five is usual. Smaller and larger numbers are also found, usually without any justification'. In a survey of potential jurors, Lindsay (1994a) found that, out of 25 variables, number of line-up foils was fourteenth in terms of its mean-rated importance (p. 372). Using foils that were similar to the culprit rather than in terms of the witness' description of the culprit, Nosworthy and Lindsay (1990) concluded that increasing the line-up size to more than a nominal size of three does not significantly increase the protection afforded an innocent suspect from a false identification. Wells et al. (1994:229) recommend that for properly conducted identifications: 'A line-up should contain at least five appropriate distractors for every one suspect', and, this 'specifies a ratio of suspects to distractors rather than a ratio of suspects to total line-up members' (p. 229). In such a line-up, there is a 16.6 per cent probability of chance identification of an innocent suspect. The same authors argue that the fact that Nosworthy and Lindsay (1990) chose foils on the basis of foil-suspect similarity instead of matching them with witnesses' description of the suspect, 'might have implications for the shape of the function relating the number of good distractors to the risk of false identifications of the suspect' (p. 229).

As already mentioned above, line-up bias refers to how far the suspect stands out in the line-up. Line-up bias often overlaps with line-up size (Brigham and Pfeiffer, 1994:202). A psychologist could be used to inform the court about the fairness of a line-up. Doing so would require working out the likelihood of any line-up member being picked out by a witness by chance alone. The formula for this is $1/N$, where N equals the size of the parade. This approach was in fact used by Buckhout

(1976)²⁹ to inform the jury in *Florida v. Richard Campbell* that the line-up in which the defendant had been identified had been biased. Buckhout reported that college students, who had not seen the defendant before, selected him 52 per cent of the time when in a six-member line-up his chance level would be only 16.7 per cent.

Regarding measures of line-up size fairness, a number of them have been proposed, namely: the effective size (Malpass, 1981; Malpass and Devine, 1983); acceptable foils (Malpass and Devine, 1983); defendant bias (Malpass and Devine, 1983); proportions (Doob and Kirschenbaum, 1973); and, finally, the functional size technique (Wells et al., 1979). Brigham and Pfeiffer (1994) provide a good account of all these techniques but Navon (1990a, 1990b) and Wells and Luus (1990) would be worth reading. The ‘diagnosticity ratio’ measure of line-up fairness refers to the ratio of correct identifications in a target-present line-up to false identifications in a target-absent one.

The suggestion for a double line-up, only one of which contains the suspect (Wells, 1984), would also point to unreliable witnesses who select an innocent foil in the blank line-up because they are anxious to select anyone or because their memory of what the culprit looked like is poor. This procedure would also reduce the pressure on the witness to select the suspect from a line-up which the witness has been informed contains the suspect. The witness would, of course, be told that only one of the line-ups contains the suspect. Research reported by Brigham and Pfeiffer (1994) found that three line-up fairness measures based on college student mock-witnesses were statistically related to direct evaluations of line-up fairness by 40 law officers and provide further support for the use of student subjects in developing such indices (pp. 216–17). Furthermore, such indices can form the basis of guidelines to the courts to decide the question of whether a particular line-up was fair or not (Wells et al., 1979).

A rather original argument has been put forward by Avraham Levi (2000) in favour of using what he calls ‘multiple-choice-sequential-large’ (MSL) line-up. The MSL: (a) consists of at least about 40 members; (b) is sequential rather than simultaneous; and (c) allows the witness to choose more than one person in the line-up. For practical reasons, it is conducted either on video or with photos. On the basis of his experiments, Levi maintains that each of the three line-up modifications mentioned contributes to reducing single choices of a line-up member in perpetrator-absent line-ups. When combined with asking the witnesses to give their confidence with each choice, they make line-up identifications diagnostic of guilt. Drawing, also, on a meta-analysis of previous studies in which witnesses gave their confidence in each choice, Levi has come to the conclusion that, ‘it is possible to clearly differentiate accurate from inaccurate “identifications” from multiple choices. The prosecution gets the evidence to convict all culprits, while the innocent are exonerated’. No doubt, Levi’s work needs to be replicated before deciding whether to adopt the MSL line-up. While the question of feasibility would not be an

The multiple-choice-sequential-large (MSL) is a promising approach in increasing line-up accuracy.

issue since the MSL does not require a live line-up, implementing Levi's suggestion would require changes to existing legislation in most countries.

Biased instructions

An identification police officer can also influence the witness' identification of the suspect by the instruction/s he/she gives the witness. This was also the view of the 63 eyewitness experts surveyed by Kassin et al. (1989). The same experts also believed the effect was reliable enough for them to so testify about it in court. Relative to 20 other factors listed, line-up instructions were perceived by the same experts to be the second-most reliable phenomena in eyewitness research. It has long been reported by a number of researchers that telling a witness the culprit is in the line-up produces high rates of mistaken identification (Cutler et al., 1987; Foster et al., 1994; Paley and Geiselman, 1989). However, Köhnken and Maass (1988, Experiment 1) challenged generalising research on biased instructions to actual line-ups on the basis that their own findings indicate that 'the instructional bias effect observed in previous experiments is limited to subjects who are fully aware that they are participating in an experiment' and the fact they failed to find a significant increase in false identifications as a function of biased instructions 'suggests that eyewitnesses are better than their reputation' (p. 369).

Cutler and Penrod's (1995a) discussion of the evidence led them to the conclusion that 'biased instructions influence identification performance even when subjects are given the option of providing no response (that is, "don't know")' (p. 122). Additional evidence that the line-up administrator can influence the witness to select the person or the photo known to be the suspect has been reported by Haw and Fisher (2004). In addition, of course, the person conducting a line-up can boost the witness' confidence that they selected the 'correct' person for the line-up (Garrioch and Brimacombe, 2001). Researchers have reported that providing witnesses with feedback after they have made a line-up identification impacts significantly on subsequent judgements they make (Wells and Bradfield, 1988). A meta-analysis of the post-identification feedback effect by Douglass and Steblay (2006) found a robust effect of confirming feedback (that is, 'Good, you identified the suspect'). Biased instructions studies, however, have not, as a rule, taken into account the gender of the witness and whether the line-up is presented simultaneously or sequentially. It should also be remembered in this context that the biased instructions effect, which inflates the false identification rate, has been found in target-absent line-ups (Paley and Geiselman, 1989). Furthermore, Foster et al. (1994) found that male witnesses were more influenced by such instructions than female ones. On the basis of the existing empirical evidence, we can conclude that a biased instructions effect has indeed been demonstrated but the way it operates is not as simple as first thought. The use of a double-blind procedure where the line-up administrator is different from the person who composed the line-up and, also, does not know who the suspect is, combined with a computerised sequential

video presentation of the line-up (as is the case in England and Wales under PACE), would seem to go a long way in reducing the scope for biased instructions.

How a line-up is presented

The police are also in a position to influence the outcome of a line-up identification by the very procedure they use, that is, whether they present a line-up simultaneously or sequentially. A line-up can be presented live, as has traditionally been the practice within British, American, Canadian and New Zealand police forces as well as those in other Commonwealth countries, or using a set of photographs or, finally, on video. Sequential presentation of photographs provides some protection to innocent suspects from mistaken identification. Video identification has been introduced in Australia, combined with the use of a one-way viewing, and is also provided for in England and Wales. Thomson (1995a:142–3) listed four advantages of presenting line-ups sequentially: (a) ‘it reduces the witness’s tendency to select the person in the line-up who best fits the witness’s memory of the offender rather than selecting the person who is positively recognised; (b) it significantly reduces the opportunity for other line-up members to cue, consciously or unconsciously; (c) the suspect can select the order in which he or she appears without conveying to the other members of the parade that he is the suspect; and, finally, (d) it more easily enables witnesses ‘to observe members of the line-up re-enacting the activities that had previously taken place’.

Bearing in mind the need for standardisation of suspect identification police procedures, Thomson’s suggestion to vary the size of line-ups so that the witness does not know how many individuals will be presented, consequently, reducing his/her temptation to select any member or foil would not be feasible because it would lead to inconsistent police procedures. In addition, even if police were to accept such a suggestion, defence attorneys would most likely attack identification evidence so obtained in cross-examination and would appeal against a conviction based on witness identification evidence obtained by police using rather inconsistent procedures.

Research into whether presenting a line-up simultaneously or sequentially influences identification accuracy³⁰ (see McQuiston-Surrett et al., 2006; Steblay et al., 2001 for literature reviews) have tended to use line-ups or photo-arrays usually consisting of a target and five to seven foils. It has been consistently found that identification performance is not significantly influenced by the type of presentation in the target-present condition. By definition, of course, an identification parade/line-up contains a suspect. As mentioned above, however, there are jurisdictions where there are no guidelines regarding the composition, size and so forth of line-ups or how they are to be conducted. The empirical evidence shows that:

- when subjects are told the offender may not be present in a line-up, the great majority assume that he /she is (Memon et al., 2004)

- presentation style does not significantly affect identification accuracy in a target-present line-up or photo-array
- with target-absent line-ups, biased instructions increase the proportion of false identifications (Stebly, 1997)
- it is only in target-absent line-ups that witnesses yield an alarmingly high rate of false identifications when a line-up or a photo-array is presented simultaneously
- the high rate of false identifications in target-absent line-ups is significantly reduced in sequential presentations for both children and adult witnesses (Parker and Ryan, 1993; Cutler and Penrod, 1995a:135). Sequential presentations also reduce the impact of biased instructions and the beneficial effects of sequential presentation are reduced if subjects have the opportunity of a target-absent practice trial or get a second chance, especially with a simultaneous presentation, after they have been exposed to all the members of a line-up sequentially
- in double-blind police video line-ups in England and Wales strict procedural instructions produce a significantly lower rate of correct identifications in culprit-present line-ups (Valentine et al., 2006)
- in double-blind police video line-ups in England and Wales neither moving (rather than still) video clips nor witness-description (rather than suspect-matched) foils improve significantly witness' identification performance in target-present or target-absent line-ups (Darling et al., 2007).

One factor that has been neglected by line-up accuracy researchers is the potential danger for identification accuracy of intervening line-ups. Hinz and Pezdek (2001) found that the effect of an intervening line-up with an innocent suspect is that the witness is significantly more likely to identify him/her second time around than the true perpetrator. In England and Wales, the Code of Practice under the *Police and Criminal Evidence Act 1984* provides that such a danger is non-existent because a new line-up would be completely new (see above), that is, the suspect who has not been identified by the witness is not brought back to participate in another line-up. As we shall see below, many of the recommendations by Wells et al. (1998) to improve the conducting of line-ups in the United States and to protect the innocent have been in place in England since 1986 when PACE was implemented³¹ and were subsequently included in the United States in the National Institute of Justice Guide (see Technical Working Group on Eyewitness Evidence, 1999, *Eyewitness Evidence: A Guide for Law Enforcement*). Finally, not everybody agrees that the present state of knowledge justifies recommending sequential line-ups to police as best practice. On the basis of their review of the literature, McQuiston-Surrett et al. (2006) have argued that such advice may in fact be immature because the conditions under which sequential line-ups are superior to simultaneous line-ups are not yet well understood. Malpass (2006) used a policy analysis model based on decision theory to examine the usefulness of simultaneous and sequential line-ups and found the former to be superior to the latter. This view is in contrast to Steblay et al.'s

(2003) conclusion on the basis of their meta-analytic review concerning the superiority of sequential line-ups, first reported by Lindsay and Wells (1985). Future research should focus on developing procedures that will reduce the mistakes eyewitnesses make under both target-present and target-absent conditions (Brewer et al., 2005:205). One such procedure, suggested by Pozzulo and Lindsay (1999), especially for children, is *elimination line-ups* in which witnesses are instructed to eliminate line-up members one after the other before making an absolute judgement about the one that remains. Another suggestion by Pryke et al. (2004) is for *multiple independent line-ups*. The idea is that having witnesses view independent line-ups of clothes, faces, voices or bodies calibrates eyewitness identification.

6 IDENTIFICATION FROM VIDEO FOOTAGE AND CCTV

Video Footage Identification

According to British researchers Pike et al. (2000), video footage, whether it is from closed-circuit television (CCTV) or police surveillance cameras, is increasingly being used to identify offenders. When this footage is of a high resolution and frames are in colour and show a clear, unobstructed close-up view of the person's face, it can be used as convincing evidence as to the identity of the perpetrator. However, often the footage is of low resolution, the face is but a small part of the image and is only in view for a few frames. Various facial comparison techniques have been developed to enable one to compare an image captured from video footage with the image of the suspect. The effectiveness of these techniques is being evaluated. Pike et al. reported a study of the effectiveness of facial comparison techniques (that is, the accuracy with which operators can determine facial orientation and the location of features in video images) in which they manipulated the ethnicity of the target face in images of varying resolution. They found that care needs to be taken using video footage to identify a perpetrator, particularly of a different race.

Identification from CCTV

The presence of millions of CCTV cameras in some countries such as Britain and digital technology offers law-enforcement agencies a potentially very useful source of suspect identification images. Leaving aside the question whether such excessive electronic surveillance is justified in terms of its usefulness in criminal investigation and/or prevention (see Crawford, 2007), the issue here is the witness accuracy of such images. In England and Wales, a witness may give evidence that he recognises or identifies a person, having viewed a video recording of the alleged crime, but the *Turnbull* directions apply (*Taylor v. Chief Constable of Cheshire* (1987) 84 Cr.App.R., 191, DC). Regarding witness recognition accuracy of CCTV images, available research evidence shows that people can accurately recognise familiar images but not unfamiliar ones (Henderson et al., 2001), with accuracy reported

though as low as 15–30 per cent (Davies and Thasen, 2000). When subjects are asked to choose a target face from an array of 10 high-quality photographs, and the correct image in the array and the target image are matched in terms of viewpoint and facial expression (that is, ideal conditions), Bruce et al. (2001) found that subjects selected correctly in 79 per cent of the arrays and concluded that caution is warranted by the courts even when the videotapes quality is high. It has also been found that being a police officer with many years of service and experience in forensic identification confers no superior ability when it comes to recognising faces from a video of poor quality (Burton et al., 1999).

The concern about the low accuracy of CCTV image recognition is further reinforced by Davis (2007),³² whose doctoral thesis reported a false alarm rate of 44 per cent (that is, an innocent bystander was identified as the suspect) by subjects who saw up to three times someone's face and body featuring for 40 seconds in a high-quality video from a number of different angles. Subjects had to match the culprit to someone actually present in the room. In the target-present condition overall accuracy was 78 per cent and 83 per cent in the target-absent condition. Finally, even when subjects were shown a face for 30 or 60 seconds to familiarise them with it and were then asked to match the target face to an array of 8 to 10 photographs in a target-present or target-absent condition, recognition accuracy was 68 per cent. We can conclude that the evidence from experimental simulation studies shows that, even under ideal conditions, the false alarm rate is worryingly high (up to one-third) if a target photo is not in the array shown. One should, therefore, expect CCTV image recognition accuracy of an unfamiliar face to be lower, even if the image is enhanced with a facial mapping technique.

7 FACIAL COMPOSITES

It is standard police practice worldwide when a crime is being reported to them and/or when an eyewitness is available, to ask for a verbal description of the culprit/s. One of the techniques used by police in criminal investigations is to ask witnesses to assist them with constructing a composite face image of the suspect by verbally describing facial features or simply selecting them from a collection provided by the police. This task can be performed manually or with the aid of computers. In fact, state-of-the-art software is fast making the police artist an endangered species. Some well-known examples of commercially available software of face composites are: *Identi-kit 2000*, *E-Fit*, *PROfit and sketch*, *FACES* and the Australian *FACE*. They all involve a witness selecting individual level characteristics from databases of facial (hair, eyebrows, nose, chin, eyes, etc.) and other features (for example, hats, glasses), which are put together to construct a composite face. Individual characteristics are then exchanged or edited using computer graphics in order to reduce discrepancies between the composite and the image of a face in the witness' memory. Sometimes, publicising a face-composite image of the suspect/s is the only avenue of enquiry available to detectives in their search for crime suspects.

The *E-Fit* is widely used in 19 countries (Turner, 2000) and, therefore, some details concerning its use would appear justified. According to Bennett et al. (2000), before a facial composite is constructed the witness is interviewed by the system operator to ascertain how well they saw the perpetrator. Only if the witness had an adequate exposure to the perpetrator will the operator proceed. A second stage of selection takes place after the composite has been constructed. When the final composite has been produced, the witness is asked to give a rating score of how good a likeness the composite is compared to their memory of the perpetrator. If the rating is below a certain amount, the composite is deemed 'negative' and is not used further in the police investigation of the case. Bennett et al. predicted that a composite is in many ways similar to a witness providing a confidence rating and would thus be expected to bear little relationship to how good a likeness the composite actually is. In a number of field studies in which trained *E-Fit* operators worked with participant-witnesses to a live, staged crime, a very low correlation was found between the rating scores provided by witnesses and the accuracy of the composite. According to Turner (2000), there are two types of *E-Fit* construction types: 'piecemeal' and 'jigsaw'. In the piecemeal technique the witness selects each feature individually, while in the jigsaw technique a witness begins by selecting features individually but each feature is left on view while subsequent features are added. One factor that may affect the quality of *E-Fit* is a form of overshadowing, which can occur when seeing similar but incorrect feature exemplars during the composite construction process³³ (see below).

Evaluation data on the operational effectiveness of face composites is rather scarce. Despite what some police members may think, the available empirical evidence indicates that computerised face composites still only contribute to the apprehension of offenders in a small minority of cases, as reported by earlier studies. The early survey by the British Home Office by Darnborough (1977)³⁴ reported that the *Photo-Fit* proved significantly useful in solving a crime in 22 per cent of applicable cases. In the absence of data regarding the types of crimes involved and the time interval between the offence and when composites were constructed, it is impossible to evaluate Darnborough's finding. Bennett (1986) sent questionnaires to 512 police officers in one Metropolitan Police area in London who had been supplied with a *Photo-Fit* image. With a response rate of 70 per cent, it was found that only 3.8 per cent indicated the *Photo-Fit* had led to an arrest. In fact, in four of the fourteen cases cleared up, the image was judged a poor likeness of the person arrested. The present author carried out a study (unpublished) on behalf of the Victoria Police, Australia, of 200 colour computer face composites (representing an 18 per cent response rate by detectives) using *Facial Composition and Editing* (FACE) provided to operational police in Melbourne by the force's specialist six-member Criminal Identification Squad during July 1995 to June 1996. The squad members had been trained in the cognitive interview technique six months prior to the commencement of the study.

It was found that the main crimes involved were theft (22 per cent), burglary (20 per cent), armed robbery (12 per cent) and assault (10 per cent); 54 per cent of

the witnesses were female, 21 per cent were aged 11–20, 44 per cent were 21–30 and 35 per cent over 30 years. It was also found that utilising *FACE*, police were able to charge someone in 19 per cent of the cases while in 23 per cent *FACE* assisted in confirming a suspect. Out of 52 cases where it was possible for police to rate the *FACE* composite on a 5-point scale in terms of its likeness to the offender, 46 per cent attracted a rating of 4 and 69 per cent a rating of 3 or greater. Finally, there were significant between-squad member differences regarding the proportion of their composite *FACE* images that contributed directly to an offender being arrested and charged – it ranged from 6.9 per cent to 33 per cent. The findings reported concerning the apparent usefulness of *FACE* composites should be treated with caution, however, due to the low response rate by detectives and the possibility that the memory of many of the witnesses was probably adversely affected by the fact that witnesses were interviewed for a *FACE* more than three days after the offence had been committed. By then, they had been interviewed by different police members, and the memory of 25 per cent had been further interfered with by being asked to look through photo albums of suspects at a police station before being interviewed for *FACE* composite. Nevertheless, the study does provide limited support for police use of computer *FACE* composites.

Newlands (2000) reported a study which investigated the efficacy of facial composites. Two days after seeing a mock perpetrator for the first time, witnesses were interviewed, gave descriptions of the suspect and helped to create computerised composites of his face using *E-Fit*. The witnesses rated the likeness of the composites to the perpetrator from their memories of him, and the most highly rated composites were chosen for use in the study. A total of 70 people to whom the perpetrator was known were shown the composite. Half saw the composite only and half saw the composite and also heard a tape of the witness' description of the perpetrator, obtained using a cognitive interview. Identification accuracy in the composite and description condition was significantly higher than in the composite-only condition. Newlands' finding supports the use of other evidence in conjunction with that gained from composite systems. Finally, Vazel and Somat (2000) compared two face-composite software packages used by French police forces, namely the *CD-fit* and *FACES*, when combined with either a standard French police interview or a guided interview, which is adapted from the cognitive interview. They found a greater degree of composite accuracy for the *CD-fit* combined with the guided interview. The need for more research in this area cannot be overemphasised, especially concerning the interactive nature of the composite face interviews and how to enhance the interviewer–witness communication.

When asking a witness for a verbal description of the suspect/s, police are in no position to know whether a line-up will later be required, and a good physical description of the culprit/s is needed to be communicated to patrol units, unmarked cars and even to a police helicopter if an operation is to be mounted to apprehend one or more serious offenders making their getaway from the scene of the crime. Schooler and Engstler-Schooler (1990) reported that the very act of asking eyewitnesses for a verbal description of the culprit can impair performance on a

delayed line-up identification test. The researchers termed this phenomenon ‘verbal overshadowing’. The identification impairment was not found, however, if the subjects did the line-up test soon after describing the culprit.

On the basis of Schooler and Engstler-Schooler’s verbal overshadowing hypothesis, we would expect this police practice to impact on an eyewitness’ line-up identification performance. Indeed, Comish (1987) found that the identification performance of subjects who had earlier tried to construct an *Identi-kit* composite image of a suspect showed more false identifications than for control subjects if the foils in the line-up resembled the experimental subjects’ errors when attempting the *Identi-kit* image. According to Lindsay, D.S. (1994:46), the effects reported by Schooler and Engstler-Schooler (1990) and Comish (1987) can be described in terms of source monitoring processes, that is, without being aware subjects draw on memories from different sources: at the encoding stage, when describing the face (the interpolated material) and when seeing it in a photo line-up, because of similarity in the information involved. Lindsay, D.S. suggests, therefore, that warning witnesses about these effects may well help to avoid them.

Research evidence from laboratory studies of varying ecological validity has reported that facial composites by *E-Fit*, *PROfit*, *FACES*, *EvoFit*, and *Identi-kit 2000* are of such operational quality as to be spontaneously named 20 per cent of the time.³⁵ Frowd et al. (2005) compared facial composites from *E-Fit* and *PROfit* (used by the Victoria Police Services in Australia), *FACES* (used in the United States) and *EvoFIT* (an experimental computerised system). Fifty-six participants viewed a photograph of a celebrity and two days later constructed a composite from one of the systems mentioned using a procedure very similar to that used by police. Independent observers were asked to name the composites. Frowd et al. (2005) found that composite naming was 3 per cent overall, with sketches named at 8 per cent. In view of the fact that other studies have consistently reported composite naming about 20 per cent of the time (especially *E-FIT* and *PROfit*).

Frowd et al. explain the low 3 per cent facial composite they found in terms of a shift in cognitive processing due to the two-day delay involved. Their argument is that the delay led their subjects to change from an analysis of features to a Gestalt, that is, a holistic impression memory of a face, favouring sketched composites as opposed to other methods compared (pp. 75–6). Frowd et al. concluded that, while their results are likely to raise concerns with law-enforcement agencies, the policy implications of their study is that police should interview witnesses soon after an incident in order to construct a facial composite with a computerised system and, where this would not be possible, to utilise a sketch artist. The same authors also call for more research to identify the mechanisms that facilitate feature-based processing for *E-FIT*, *PROfit* and *FACES* systems, thus improving facial composite quality. One way of improving the otherwise low identification rates of facial composites is by presenting the witness with more than one composite of the suspect (Brace et al., 2006).

Of course, as far as the outcome of criminal investigations is concerned, the use of a face composite is but one of many factors that can contribute to a crime

being cleared up. Also, there is evidence that, when not instructed to do so, only 4 per cent of witnesses report focusing on facial cues (Tooley et al., 1984, cited by Deffenbacher, 1989:566). Finally, likely difficulties in communication between the witness and the operator of the computer-witness interaction system mean that the hard copy generated is at best a poor likeness of the suspect (Davies, 1981, 1983, 1986b). Having witnesses directly produce the computer image would not be feasible because of the heterogeneity of crime victims, time considerations and implications for police resources. In addition, there is evidence that having a witness (children aged five and six years) make a drawing of the suspect as an intervening task between witnessing an event and line-up identification two weeks later is correlated with more false line-up identifications (Vilhelmy, 2000).

8 VOICE IDENTIFICATION

People have stereotypes of what sort of individuals speak with what kind of voices, and this applies also to stereotypes of different kinds of criminals (Yarmey, 1995:268). It is on the basis of stereotypes that people try to visualise a stranger they talk to on the phone or hear on radio. There is no convincing empirical evidence, however, that supports the validity of such noble endeavours since, at best, people can recognise a speaker's gender (Lass et al., 1976, in Yarmey, 1995). Voice identification has been a neglected topic in witness testimony research.³⁶ This section draws partly on discussions of the relevant empirical literature by Bull and Clifford (1984, 1999), Hammersley and Read (1995), Thomson (1995a) and Yarmey (1995). Admittedly, voice identification is involved in a small minority of criminal cases. In some such cases, however, voice identification may constitute a vital aspect of the legal proceedings against an offender. Furthermore, it has been found that mock-jurors are more likely to convict if the evidence against the defendant includes confident positive identification by an earwitness (Van Wallendael et al., 1994:672) than on the basis of circumstantial evidence only.

When voice identification is an issue in a trial in England and Wales,³⁷ the full *Turnbull* warning shall be given because voice identification is less accurate than visual identification.³⁸ Also, a jury that does not have the benefit of expert opinion should be directed by the judge not to compare one voice with another because of the inherent dangers in so doing (*R v. Chenia* [2003] 2 Cr.App.R. 6, CA). The Northern Ireland Court of Appeal in *R v. O'Doherty* [2003] 1 Cr.App.R. 5, emphasised the need for expert evidence of acoustic analysis and not just auditory analysis. This requirement, however, would not apply if the issue were who among a group of people listened to spoke particular words or there existed rare features to identify the speaker or where the issue were about accent or dialect. However, if in the course of conversation with someone a police officer recognises his voice as that of a person recalled on tapes, the police officer's evidence to that effect is admissible (see *R v. Robb*, 93 Crim.App.R. 161).

Formal advice to police in England and Wales on the use of voice identification parades procedures to generate admissible evidence has been provided by the

Home Office in its Circular 057/2003.³⁹ The procedures provided are based on the successful prosecution in 2002 of the case of *R v. Khan and Bains*⁴⁰ and are an example of good practice. *Inter alia*, the circular recommends that: the police officer in charge of the voice identification parade should obtain a detailed statement from the witness, following the guidelines handed down in *Turnbull* case in 1977; a representative sample of the suspect's voice should be obtained after informing him about it at the outset and obtaining his consent; under no circumstances should the suspect be invited to read any set text; obtain no less than 20 sample of speech from persons of similar age and ethnic, regional and social background as the suspect; request the services of a police force-approved expert witness in phonetics or linguistics to select and compile a final parade of nine speech samples to be recorded onto three video cassettes, each of which should have the sample in a different order; give the suspect's solicitor opportunity to be present when the voice identification procedure is conducted; the voice identification procedure is videotaped; the witness is told the suspect's voice may or may not be one of the samples and is allowed to listen to any or all of the speech samples as many times as they wish. The voice of an offender over the phone (for example, in extortion or obscene calls) or during the commission of crimes such as rape or armed robbery by an offender who is well hidden by darkness, or is well disguised, or attacks the victim from behind, or when someone overhears offenders planning their crime or reflecting on a crime they have just committed, may be the only identification evidence available. In such cases the victim or the earwitness may later be asked to identify the offender's voice in a tape-recorded voice line-up. To illustrate such cases, here is an example from England.

CASE STUDY

Real conditions for voice witness identification

In the Johnson case, *The Times*, 9 July 1994, the victim and her boyfriend were asleep at night when they were awakened by an intruder who was caressing the victim's stomach. Threatening them with a knife, the offender proceeded to tie and gag the boyfriend and to assault and attempt rape and buggery of the woman. The two victims reported to the police that the culprit had a deep voice and a slight London accent. The offender was arrested and the two victims selected his voice from nine tape-recorded extracts of voices. The offender's voice was third in line. Hearing the extract of her rapist's voice 'made her go cold and shaky'⁴¹ This is a far cry from the conditions under which simulation studies of voice identification are carried out.

Voice identification has been accepted in English courts since the case of *Hulet* in 1660 (Hollien et al., 1983) but the general public on both sides of the Atlantic became more aware of its importance in the baby *Lindbergh* kidnapping case in the 1930s in the United States.⁴² In that case, Colonel Lindbergh, positively recognised the kidnapper's voice almost three years after the crime was committed, evidence that was very important in securing the conviction of the defendant. The *Lindbergh* case also provided the stimulus for the early, pioneering work into voice recognition by McGehee (1937). Courts in common law jurisdictions generally recognise that there is in existence expert study and knowledge of voice identification.⁴³ As already mentioned, in England and Wales, a suitably adapted *Turnbull* warning should be given by the judiciary regarding earwitness testimony (*Hersey* (1998) Crim.L.R. 281, CA). Regarding how knowledgeable lay people and police officers are concerning earwitness identification performance, Philippon, et al. (2006a) surveyed 49 members of the public and 60 police officers and reported that the respondents were more knowledgeable than expected and, also, that police officers were no more knowledgeable than others.

How accurate, then, is voice identification by humans? Before turning our attention to the empirical literature it should be noted that as far as voice identification by humans vs voice identification by machine is concerned, Hammersley and Read (1995)⁴⁴ stated in their literature review that computers can exceed human listeners in voice recognition accuracy, even achieving an error rate of only 5 per cent. The accuracy of their prediction, however, remains to be demonstrated.

The existing literature shows a remarkable degree of similarity between visual and voice identification, as the studies below testify. Earwitnesses, like eyewitnesses, are equally prone to error and thus potentially as unreliable. It should be noted, however, that most of the studies on voice identification have been carried out under low conditions of ecological validity. For example, only a very small number of researchers have examined voice memory under conditions of unpreparedness and/or violence (see Clifford, 1980; Saslove and Yarmey, 1980; Yarmey, 1991). Let us next consider the reported impact on voice identification of a broad range of factors.

Circumstances Under which a Voice is Heard

It is sometimes the case that a crime is perpetrated by more than one offender. It has been found that if witnesses initially hear a *number of voices* their subsequent voice recognition accuracy is negatively affected (Goldstein and Chance, 1985;⁴⁵ Legge et al., 1984; McGehee, 1937). McGehee (1937) reported that voice recognition accuracy decreased significantly within 24 hours when subjects had to recognise three voices instead of one. Many offences against the person (for example, assault, mugging, sexual assault) involve the use of threat of violence, often backed up with possession of a weapon, or actual use of violence against the victim who no doubt finds the experience very stressful. Yarmey and Pauley (1993)⁴⁶ investigated the

influence on voice recognition accuracy of the *presence of a weapon* and whether *abusive language* was used in a videotape of a hold-up by a masked offender. Neither variable was found to impact significantly on voice recognition accuracy or false identifications in a voice line-up but allowed 'guilty suspects more easily to escape detection' (Yarmey, 1995:266). One possibility not considered by Yarmey and Pauley is that if the robber wore a mask it clouded any weapon or abusive language effect on the listeners. Whether a *speaker is under stress* at the time of communicating a message or when being tested later on has been found to impact adversely on the accuracy with which his/her voice will be identified (Hecker et al., 1968).

In real life the victim of a crime often will converse with the offender/s even though they may exchange but a few words. Studies of earwitness accuracy, however, have only examined memory for a passively heard voice, irrespective of whether the subjects have been warned. Hammersley and Read (1985) examined the effect of participation in a conversation on identification of the speaker's voice and found that *passively heard voices* were rarely selected at above-chance level. In other words, 'talking to someone leads one to recognise and identify their voice better than listening to someone' (p. 79). Voices heard *over the telephone* are a little more difficult to recognise than voices heard directly from *tape-recorders* (Clifford et al., 1980:100).

Characteristics of the Voice

Witnesses are poor estimators of the *duration* of a voice sample. Yarmey and Matthys (1992) found that 98 per cent of the participants in their study overestimated the duration of 72-second samples, giving an average time estimation of 312 seconds. As the same authors advise: 'time estimates in forensic situations should be accepted with great caution' (p. 233).

In contrast to Pollack et al. (1954), Clifford et al. (1980) reported that identification accuracy of adults is not related to the duration of the speech sample listened to, with the proviso that subjects hear at least one sentence. In the case of children, however, accuracy of voice identification correlates with the length of the speech sample, that is, with the length of exposure (p. 379). Brickner and Bruzansky (1966) looked at the effect of both duration and the length of speech samples on earwitness identification. They found that for the voices of people who worked together there was 98 per cent correct identification for sentences spoken, 84 per cent for syllables and 56 per cent for vowel excerpts. Bull and Clifford (1984) reported that voice recognition is possible even with 2-second short speech samples. The longer the duration of the speech sample, however, the better the accuracy.⁴⁷ Yarmey and Matthys (1992) also found, however, that as speech duration increases to 2 or 6 minutes so does the rate of false identifications, especially in a target-absent condition (see also Yarmey, 1991). On the basis of their literature review, Bull and Clifford (1999) concluded that: 'What all of these research studies seem to add up

to is that the greater the variety of a perpetrator's voice that is initially heard the more likely is an earwitness later correctly to recognise the voice. What has not yet been clearly established by research is how short the sample needs to be before subsequent correct recognition is unlikely' (p. 199).

Many offenders attempt to *disguise* their voices to impede their identification. In addition, easily accessible advanced technology enables one to so transform salient features of a tape-recorded message as to disguise it. There is empirical support for the view that disguising one's voice (for example, by a change in pitch) means a witness cannot draw on voice characteristics that are crucial in its identification (Clifford, 1983). An easy way to disguise one's voice mentioned by Yarmey (1995: 266) is to communicate in an angry tone of voice (Clifford and Denot, 1982;⁴⁸ Saslove and Yarmey, 1980) or to whisper a statement (Orchard, 1993).⁴⁹ As would have been expected, a number of researchers have reported that subjects are significantly less likely to correctly identify a disguised (in terms of tone) than a non-disguised voice.⁵⁰

Defendants in criminal trials involving voice identification are generally strangers to the victim. But how good are we recognising *familiar voices*? Bartholomews (1973) reported that the voice recognition accuracy of nursery school children was better than chance for tape-recorded speech samples of classmates and teachers they had known for five months. Adults in the same study did significantly better than children but had an inaccuracy rate of 19 per cent. Individual children's identification performance was as good as that of adults. As Yarmey (1995:263) puts it, how accurate we are in recognising a familiar voice depends on the context and our own expectations. Yarmey (p. 263) cites the following anecdotal evidence for familiar voice recognition accuracy: 'While driving to work in San Francisco, Doug Friday, 33, heard a woman tell a radio phone-in audience that she had taken a lover because her husband neglected her. Recognising the voice of the speaker as his wife Joana, Doug filed for divorce' (*Toronto Star*, 15 August 1982). Goldstein and Chance (1985) asked subjects to identify nine familiar voices from 11 unfamiliar ones and found that 40 per cent of the subjects were unable to recognise all familiar voices. In this sense, a voice line-up for a familiar speaker makes sense. It appears, therefore, that recognising voices familiar to us may not be as straightforward as many believe.

For those readers who are monolingual it probably comes as no surprise to be told that Anglophone-only subjects in the Thompson (1987) study recognised a voice with significantly greater accuracy when speaking in English than when the same voice was heard speaking in Spanish; in other words, *language familiarity* had a positive effect on voice recognition accuracy. Further evidence for the language familiarity *effect* has been reported by researchers in Britain. Philippon et al. (2006b) exposed English speakers to an auditory event containing 45 to 50 seconds of speech and, after a 3-second delay, subjects listened to a target-present or target-absent voice line-up either in a familiar (English) or unfamiliar language (French).

Significantly better performance was found in the familiar language target-present line-ups. Many people who speak a second language do so with an *accent*. A Dutch study by Kerstholt et al. (2006) investigated the effect of accent on speaker identification with 360 subjects who heard the target voice and were asked to identify it from a six-voice line-up. The speaker with the non-standard accented voice was recognised less often than the speaker with the standard-accented voice. In view of the extent to which unification has taken place in Europe, the fact that travel permeates contemporary life, and the increasing proportion of people who are at least bilingual, if not polyglots, and often speak a foreign language with an accent, this is an area that deserves more attention by experimental psychologists. Such research would be of practical interest to police forces in different parts of the world.

It is not uncommon for extortionists to aurally communicate their demands in a piecemeal fashion, out of a concern, perhaps, that the telephone they are calling from can be identified if they speak long enough. One hopes such criminals will continue this practice (unless they read this book!) because there is empirical support for the hypothesis that *hearing the same voice repeatedly* for short periods instead of hearing the whole voice sample on one single occasion correlates with high voice recognition accuracy (Goldstein and Chance, 1985; Yarmey and Matthys, 1992).

Delay

How much time elapses between actual earwitnesses hearing a voice and when they are asked to identify it varies from case to case. There has been no consistency in the findings reported about the effect of *retention interval* on voice recognition accuracy. McGehee (1937) had subjects listen to a 50-word passage read by an unseen speaker at different time intervals. Later subjects were asked to identify the speaker from among four others reading the same passage. It was found that identification accuracy was 83 per cent at two days, 68 per cent at two weeks, 35 per cent at three months, and 13 per cent at five months. Other researchers found no significant decrease in accuracy 24 hours later (Saslove and Yarmey, 1980) while others have reported a significant negative effect over 24 hours (Clifford et al., 1981; Hammersley and Read, 1985), one week (Thompson, 1985a) or two weeks (Goldstein and Chance, 1985). A week after subjects in the Thompson (1985a) study heard a reader's voice, they were asked to select the voice from an array of six voices. Some subjects' voice-recognition accuracy was no better than chance. Van Wallendael et al. (1994) reported that retention interval (0 days, 7 days and 14 days) had no detrimental effect on voice recognition accuracy in both target-present and target-absent conditions (pp. 666–7). Yarmey and Matthys (1992) found that while voice recognition accuracy did not differ significantly over a one-week period, the false alarm rate increased over the same delay. Finally, the Dutch study by Kerstholt et al. (2006) found no difference between identification accuracy after 1, 3 or 8 weeks. In considering the conflicting findings concerning the effect of

retention interval on voice recognition, it should be noted that, as Yarmey (1995) pointed out, 'forgetting over time depends upon the extent of original learning; some voices because of their distinctiveness may be more easily learned and less affected by delay in testing' (p. 267).

Listener Characteristics

As far as the *age* of the earwitness is concerned, it is known that infants under six months of age can differentiate their mother's voice from that of strangers (Friedlander, 1970). Conflicting findings have been reported about whether voice recognition accuracy in children increases with age. Peter's (1987) study of children aged 3–8 years found that identification performance was generally poor irrespective of the age of the children when their recognition was tested 24 and 48 hours following a visit to the dentist and conversing with the target speaker for five minutes. An earlier study by Mann et al. (1979) reported that voice recognition accuracy increases from age 6–10 but declines during the ages 10 to 14. Differences have also been reported for different adult age-groups. Bull and Clifford (1984) reported that individuals under 21 years of age and those over 40 showed inferior voice recognition accuracy than those aged 21 to 40. Bull and Clifford (1999:199) point out, however, this finding may reflect age differences in attention deployment and perception of social situations. Regarding the question of whether adults' voice recognition accuracy is significantly better than children's, Mann et al. (1979) found that accuracy among children aged 10 approached that of adults. Available evidence shows that children and adults are equally poor at voice-identification (Clifford, 1997; Clifford and Toplis, 1996). More ecologically valid research into age differences in voice recognition accuracy is needed before definitive conclusions can be drawn about the children vs adults issue.

As far as *gender* differences are concerned, McGehee (1937) found male subjects better only at recognising female voices. Clifford et al. (1980) reported that in general female listeners were better than male listeners. Thompson (1985a) had subjects identify a reader's voice from an array of six voices. One week later, no gender differences were found. Finally, Yarmey and Matthys (1992:375) varied voice-sample duration (18 seconds, 36 seconds, 120 seconds and 6 minutes) and, like Yarmey (1986b), found no gender differences, with one exception – 'Females were reliably inferior to males in hit scores with the 6-minute voice sample'. Yarmey and Matthys offer no theoretical reason for the one specific gender difference they found. The available literature, therefore, does not point to gender differences in voice recognition (Yarmey, 1995:267; Bull and Clifford, 1999:199).

Regarding the importance of the *race* of the speaker and the earwitness, Goldstein et al. (1981) could find no clear evidence of cross-racial difficulties in speaker identification. In their report to the British Home Office, Clifford et al. (1980:100),

unlike Winograd et al. (1984), concluded that sighted listeners are not as accurate at recognising a voice as *blind listeners*. However, empirical studies of the nature of the relationship between earwitness *confidence* and accuracy have found some support for a positive relationship. More specifically, a positive correlation was reported by Clifford and Bull (1984), a small but significant correlation by Saslove and Yarmey (1980), a significant correlation in the target-absent condition (Yarmey, 1991) and, finally, a significant positive relationship with voice-sample duration of 2 or 6 minutes but not 18 or 36 seconds (Yarmey and Matthys, 1992). Yarmey et al. (1994), however, found no significant relationship between confidence and voice recognition accuracy in show-ups and six-voice line-ups in both target-present and target-absent conditions. Taking into account Clifford and Bulloch (1999),⁵¹ the available evidence indicates that, as in the case of eyewitness testimony, earwitness' confidence is not a reliable criterion by which to judge the accuracy of earwitness' accuracy.

Commonsense would lead us to predict that *experts*, highly skilled, experienced phoneticians would show significantly better voice recognition accuracy than non-voice experts. Ladefoged (1981, in Yarmey, 1995) appears to be the only study to have investigated this hypothesis and found that nine of the eleven phoneticians tested made correct identifications of all eleven familiar target speakers, but five of the 'experts' also falsely identified an unfamiliar speaker. Correct identification of unfamiliar voices poses difficulties even for phoneticians. The McGehee (1944) study reported some evidence that it might be possible to *train people* in voice recognition. Later research, however, has failed to find support for trainability (Clifford et al., 1980). Available evidence suggest that training people to improve their voice recognition accuracy should include teaching them to use the right *strategy*. Philippon et al. (2006b) found that participants in their study who reported using an 'elimination' rather than a 'matching' strategy were significantly more accurate in voice recognition.

Post-event Interference

As in the case of eyewitness testimony, there is empirical support for post-event interference on subsequent voice recognition. Subjects in Thompson's (1985b) study listened to a tape-recorded message and 2–7 days later they listened to another voice that was either the same as the original voice or a lure and had to identify it. One month later their voice recognition accuracy was tested with a six-voice line-up that included both the original and the lure voice. Thompson found that subjects who had been exposed to the lure were significantly more likely to falsely identify it as the original voice than those who had not been exposed to the lure between hearing the original voice and the test. The adverse effect of an interpolated test that plants new information in earwitnesses' memory (that is, contaminates it) for voices could easily be produced by police investigators who sometimes test witnesses' memory

of a suspect's voice on more than one occasion for operational reasons. Such a practice should definitely be avoided.

Identification Procedure Used

In view of the fact that voice line-ups are more time consuming to arrange than show-ups, police investigators might be interested in the finding that voice recognition accuracy has been found to be poor in both procedures by Yarmey et al. (1994). Clifford et al. (1980:100) reported that identification accuracy is decreased by the size of the voice parade. As with visual line-ups, the array in laboratory research may include the suspect's voice (target-present) or not include it. Earwitness voice recognition accuracy has been found to be higher in the target-present condition (Philippon et al., 2006b). However, Kerstholt et al. (2006) found voice recognition accuracy to be 24 per cent in the target-present and 50 per cent false identifications in the target-absent condition.

Voice-identification Accuracy: Conclusions

On the basis of the available literature it can be concluded that while in many situations human listeners are capable of accurate voice identification, the reliability of earwitness testimony is affected by a number of factors, namely, the duration of the verbal communication listened to and the number of voices listened to at the time a crime is being perpetrated. Additional factors are the pitch of the voice, delay in an earwitness being asked to identify the suspect's voice, whether the witness has been an unexpected earwitness and whether the earwitness has conversed with the speaker. Finally, the emotional state at the time of encoding as well as the age and the gender of the witness and whether the voice is disguised impact on voice recognition accuracy. It would appear that voice recognition is more difficult than visual identification (Legge et al., 1984; McAlister et al., 1993).

In view of the limitation of human voice identification accuracy, Clifford et al. (1980:101) concluded that: 'the complexities of criminal identification by voice are no greater than by visual means', and that 'while verbal identification like any evidence of identification will need to be treated with caution there is no evidence that it should be ignored'. Since then a great deal of research has been carried out. Hammersley and Read (1995) pointed out in their review of the literature that earwitness performance in experimental studies may have frequently been found to be poor because the researchers used recognition tasks that are intrinsically too difficult. They urge caution in interpreting earwitness accuracy findings from well-controlled laboratory studies. They also state that recognition of a familiar voice is a more feasible task but one that has attracted the attention of few researchers. They conclude that, while 'Generally, voice identification or recognition does not guarantee the speaker's identity and one should be pessimistic about the likelihood of recognition' (p. 147), they concede that such identification can be possible and

can be tested in a voice line-up on the condition that the voice line-up is valid and the results are not misinterpreted. They suggest that future research looks at the questions of how voice and speech processing interact, whether listeners develop a holistic representation of someone's voice with enough exposure to them and, finally, how such exposure, its duration, how it is spaced out as well as its content, influence the accuracy of subsequent voice recognition (p. 147).

Bull and Clifford (1999) concluded their literature review stating that: 'For the criminal justice system, the current findings suggest that police and courts should treat voice identification made by auditory-visual witnesses with caution' (p. 169). Of course, this is not to deny that voice identification can indeed be very accurate. However, normally the circumstances under which a crime victim/witness listens to someone's voice are such that Yarmey (1995) recommends that, in most circumstances, a case should not proceed if it is based exclusively on voice identification; even then, however, voice identification should satisfy three criteria, namely: that there was very good opportunity for the witness to listen; that the witness was intentionally prepared to remember the perpetrator's voice; and, finally, that the appropriate identification procedures have been followed (pp. 270–1).

CONCLUSIONS

The extent of similarity between visual and voice identification is exemplified by the finding that when listeners attending a voice parade were instructed that the target voice might be absent, they were still reluctant to indicate its absence, that is, earwitnesses, too, approach their task with a mental set to select someone (Clifford et al., 1980:101). As Wells et al. (1994:224) reminded us, no eyewitness author has as yet proposed a coherent theoretical framework to account for the social and cognitive processes involved in deciding whether to select a particular line-up member as the suspect. The same authors refer to such social and cognitive processes as 'the eyewitness identification process' (p. 224).

The available empirical evidence shows that mugshots are a useful investigative tool, but their use is not without danger. As far as show-ups are concerned, while the issue of their accuracy compared to line-ups remains unresolved, low ecological validity laboratory studies have exaggerated the risks of false witness identification. Researchers of line-up accuracy supplement experimental simulated studies with archival research, controlling for relevant factors when examining accuracy rates. Concern about the rather low accuracy of unfamiliar CCTV image recognition remains. Without ignoring limitations of psychological studies of identification procedures, undesirable police practices are a major cause of eyewitness misidentification. While there is some limited empirical evidence that police computer face-composite images appear to be useful to police hard-pressed to apprehend offenders, the range of identification procedures considered in this chapter is fraught with risks for the innocent. As McKenzie (1995) puts it, the question of fairness to the police, the accused and the victim is the issue in this context. Fortunately,

available evidence suggests that the low accuracy rates of facial composites can be improved. This is an area that warrants more attention by researchers. Today we know more about voice identification accuracy than we did a few years ago, the prevailing view among researchers is that voice recognition accuracy is generally low and, finally, more ecologically valid research is required before a satisfactory answer can be given to the question of how to improve earwitness' accuracy.

Psychologists have already contributed a great deal in this controversial area and have helped to improve the fairness of police identification procedures. Legislative reforms such as the Code of Practice D of the *Police and Criminal Evidence Act 1984* in England and Wales and official guidelines on witness interviewing procedures cannot be said to have eliminated the risk of mistaken identification and of miscarriages of justice in those countries. However, as Davies and Valentine (1999:65) put it, such errors are now more likely to reflect a failure to follow the existing Code of Practice rather than be due to gaps or ambiguities in the Code itself. In the United States, miscarriages of justice continue to be a risk to a greater extent than in England and Wales because of the lack of uniformity as far as suspect identification procedures and law-enforcement training in such procedures are concerned.

Psychologists still have much to contribute to this interesting area of law and law enforcement, to prevent even more miscarriages of justice. To this end, psychologists should play a more active role in educating operational police, lawyers, jurors, the judiciary and the public at large about the need to strike a balance between, on the one hand, police investigators' wish to solve crimes reported to them and see the guilty convicted and, on the other, the need to minimise various dangers for the innocent suspect that are inherent in police identification procedures. The same comment applies to suspect identification procedures as far as international criminal tribunals are concerned.

REVISION QUESTIONS

- 1 What is the evidence that there is an eyewitness identification problem?
- 2 What is meant by the term 'Turnbull warning'?
- 3 What does 'unconscious transference' refer to?
- 4 What can we conclude about eyewitness identification accuracy in show-ups?
What can be done to improve eyewitness identification accuracy in show-ups?
- 5 What are some sources of bias in line-up identification and what can be done about them?
- 6 What do you know about the operational usefulness of facial composites and how it can be improved?
- 7 What factors influence voice identification accuracy?
- 8 Why are written suspect identification procedure guidelines uniform and more sophisticated in England and Wales than in the United States?

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10

PSYCHOLOGY AND THE POLICE

CHAPTER OUTLINE

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Interrogation remains an important investigative tool. There are immense differences between the current investigative interviewing techniques and conditions of custodial confinement, as practiced in England, and those legally allowed and practiced in the USA.

(Gudjonsson, 2006:143).

Police stop tactics, when used in a racist manner, run the risk of causing profound public resentment.

(Miller et al., 2008:162).

If people are involved in extreme and violent acts, we tend to assume that their personality must be similarly extreme and deviant. We then tend to make any available evidence fit with our assumptions. This is exactly what happened with the captured Nazis, and the same effect can be seen in the way most people consider the psychology of terrorists.

(Silke, 2008:104)

INTRODUCTION

The domain of policing offers ample opportunity for psychological research. As police management becomes more educated and more professional and they appreciate psychological research more – for example, in relation to fitness-for-duty evaluations, selection, promotion, the work of specialist units, hostage-taking incidents, and an evaluation component is included more often than it used to be when changes are introduced within police forces – psychologists have come to play a more significant part by contributing to knowledge about, and influencing developments in, a broad range of policing issues. However, psychologists need to be closely integrated into police forces if they are to perform their various roles constructively. This chapter does not consider many topics within criminological psychology of interest to law-enforcement personnel, such as theories of criminal behaviour,¹ empirical studies of particular types of violent offenders,² police decisions to prosecute (Grant et al., 1982; Tuohy et al., 1993; Sanders, 1997), decision making in violent or potentially violent confrontations or police use of firearms,³ or police officers' perceptions of different offences.⁴ The focus of this chapter is primarily at the micro-level, encompassing studies of police and psychological knowledge applied to police work, including profiling and terrorism.

A relevant tertiary educational qualification has come to be considered a desirable credential (Breci, 1997) or even an essential one for police officers in a number of western countries. This is not to deny, of course, that in some countries (for example, Turkey) with a large population of large families, a high rate of illiteracy, unemployment and guarantee of a job in the police force, many high school students choose the police profession as a career for economic reasons, especially in the light of occupational socialisation within their families (Ozcan and Caglar, 1994). Police psychology has a long history⁵ and is a well-established discipline in a number of countries, and psychology modules form an integral part of courses taught to new recruits, sub-officers and officers in many a police force and to university students worldwide. Whether employed as civilians or gazetted officers, specialist psychologists are an integral part of many police forces throughout the world. Police psychologists, for example, play a vital role in personnel selection (Bartol, 1996), in training and in hostage negotiation (see Hatcher et al., 1998). The relationship between police officers and psychologists, however, is not without conflict (Ainsworth, 2000b:40–1).

In considering the psychological literature in this chapter, the reader needs to note the country of origin of a particular study. While law-enforcement personnel in different countries have a lot in common, there exist significant differences between police forces in different countries regarding general cultural differences, the laws governing their powers, their structure and procedures, accountability, selection and training, police subculture, use of technology and, finally, the type of demands placed on the police. Such important differences mean that one should not readily generalise findings from one country to another. The reader should also note in this

context that, as Yuille (1992) pointed out, some psychologists have been too eager to apply their research findings (for example, in eyewitness testimony) to policing 'without any apparent concern about the generalizability of the results' (p. 207). Overselling psychology to police management (as Münsterberg, 1908, tried to do with the legal profession) is likely to have negative consequences – in fact, such a practice is dangerous for the healthy development of the field of legal psychology in general.

1 SELECTION

Perusal of the annual reports of western police forces shows that their demographic composition has changed since the mid-1980s to include a greater proportion of females, university graduates and ethnic minority group members. At the same time, the role of police officers has become much broader and a lot more demanding (Dutton, 1986). It would not be an exaggeration to say that no other occupation calls for such a diversity of skills as that of being a police officer and includes: responding to and investigating crime dealing with distraught accident and crime victims and witnesses, coping with an angry crowd, diffusing a domestic dispute, and having to knock on someone's door to tell them a loved one has been killed in a road accident. The sheer variety of police skills is probably a factor that explains the popularity of cop shows on television in crime-obsessed societies but it makes the task of reaching consensus on the qualities a police officer should possess and selecting new recruits almost impossible. Regarding the question of what police officers do while on duty, a national activity survey of a sample of 1600 community constables and general duty officers in England and Wales found that: (a) about one-third of a typical tour of duty of community constables and about two-fifths of the typical tour of duty of general duty officers was spent inside the police station; and (b) when inside the station, most of their time was spent on administrative duties (including paperwork) and when outside the station, most of their time is spent on routine patrol (Bennett and Lupton, 1992).

Of course, there are significant differences in how different police forces, even in the same country, select their new recruits. Attractive salaries in some countries and/or high levels of unemployment mean that it is no longer a case of screening applicants who meet the minimum criteria. One of the consequences of this has been a more sophisticated approach to police selection that aims to identify the 'right person for the job'.⁶ A number of interesting and methodologically good studies have been reported since Bull et al.'s (1983) book, Burbeck and Furnham's 1985 comprehensive review of the psychological literature on psychological testing, job analysis and the selection interview and since Yuille (1986), Ainsworth and Pease (1987) and Hollin (1989) were published.⁷ Mirrlees-Black's (1992) assessment of the usefulness of psychometric personality tests in the selection of firearms police officers will use is very thorough and draws attention to the uncertainty that

exists about the value of this method of selection as well as to some concomitant ethical problems. While this section⁸ deals with selection of recruits, it needs to be remembered that police selection also includes selecting experienced police officers for such specialist roles as detectives, bomb disposal, covert policing or emergency operation teams (see Scrivner, 1986).

Since the 1970s, psychological testing in law enforcement has become very widespread, using such well-known tests as the MMPI, CPI and the 16PF. Supporters of the use of psychometric tests to screen in or screen out applicants to join police forces or police personnel to perform specialist functions have to confront the argument that, generally speaking, scores on such tests do not predict future performance. This, of course, does not mean that psychometric tests do not say something about individuals; rather, it points to the importance of such factors as faking by test-takers and the possibility that what a police psychologist might be trying to predict may well be influenced by stress, physical exhaustion and other factors present in an operational context, that militate against the predictive value of psychological tests.

The police selection field is also plagued by the simple fact that there is no general agreement on what qualities a good recruit should possess and there is a lack of information concerning those who are not recruited. Ainsworth (1993)⁹ reported a study in which a small sample of British police officers attending a course at Manchester University listed the following qualities in order of importance: a sense of humour, communication skills, adaptability, commonsense, resilience, assertiveness, sensitivity, tolerance, integrity, literacy, honesty, and problem-solving ability. Of course, while some of these traits can be reliably measured, others cannot (Ainsworth, 1995:137). A key question in police psychology is whether some types of people (in terms of their values, attitudes or personality) are more likely to want to become police officers and it is this that explains characteristics of serving police personnel (the 'pre-dispositional' model) or whether such police characteristics reflect the impact of training and socialisation into the police role (the 'socialisation' model). The selection process usually comprises medical and fitness tests, psychological testing and interview/s. Appearing before a board to answer questions is part of the police screening experience worldwide. Although veteran police officers place a lot of emphasis on oral interviews of applicants, such interviews have not been found to be very useful in predicting success as a police officer (Landy, 1976). Without denying some interviewers' ability to pick out the successful candidates, especially if they ask all applicants the same questions orally and rate them systematically, the fact is that the oral interview alone is not sufficient to screen applicants with a reasonable likelihood of success in the absence of psychological assessment, background checks and, in very few countries, polygraph examination. On the basis of both US and British studies of police values, utilising, for example, the Rokeach Value Survey,¹⁰ Burbeck and Furnham (1985) concluded that: 'police officers' values seem pretty representative of those of people from their

own age and class, though these are not very close to the population at large. However, some of these values appear to change with the experience of being a police officer' (p. 60).

According to Worden (1993), the stereotypical police officer holds a jaundiced view of citizens, and the insularity and isolation of the job is thought to encourage an 'us against them' mentality (pp. 210–11). At the same time, because the perceived role of police emphasises fighting crime and especially their prosecutorial role (Stephenson, 1992:114), operational police appear to have a 'concern for the truth: in what actually happens, rather than what they might wish to happen' (Brown, 1988).¹¹

It does appear that police are generally perceived, especially by young people, as authoritarian and conservative. But are they? The answer to this question is important (Hollin, 1989) because, as Brown and Willis (1985) pointed out, authoritarianism is a recurring theme in police research and also because it relates to hostile police attitudes and behaviour that should not be tolerated and is also associated with unacceptable treatment of racial minorities (Scarman, 1981– see the section 'Prejudice and discrimination' below).

Research into police attitudes on both sides of the Atlantic¹² has been criticised for inadequate matching of controls and because results reported are difficult to interpret in view of the likely possibility that subjects fake their responses to impress (Burbeck and Furnham, 1985). Not surprisingly, such studies of police attitudes have reported conflicting findings. In an interesting study by Brown and Willis (1985) a revised version of the F (fascism) scale was administered to two groups of police recruits, one in the north (N = 54 Ms and 19 Fs) and one in the south of England (N = 30 Ms and 6 Fs). A third group of 16 fire-service recruits were also administered the scale. Recruits completed the scale during the first week, 12–13 weeks upon completion of training and after three months in the job. The researchers also interviewed 25 police inspectors and chief inspectors about their reactions to the preliminary findings. Brown and Willis found support for the socialisation model as recruits were low on authoritarianism during training but experience on the beat increased their authoritarianism. It was also found that the impact of operational policing experience was greater for those who worked in a high-crime area and in a police force that used a more traditional approach to policing. Brown and Willis' findings emphasise the importance of the well-established practice whereby more experienced police members pass on the police subculture (also termed 'locker room culture' by Holdaway, 1983, with its norms for malpractice and emphasis on excitement and taking risks) to the neophytes who are in no position to question advice given them by the station sergeant, for example. The Brown and Willis (1985) study has a number of weaknesses. However, as they themselves admit, the version of the F scale used means their results are not comparable with those of other studies; furthermore, 16 fire-service recruits cannot be said to be an adequate control group. Recent British research suggests that police officers may be closer to the societal norm than has been claimed, as far as

authoritarianism is concerned. Scripture (1997) reported a questionnaire survey of a stratified sample of 286 serving Metropolitan Police officers in London concerning capital punishment, the right to strike, the right to active political involvement, their perceived level of public support and, finally, their voting habits. Scripture found that, while conservatism appeared to be the police officers' predominant political belief, there was no support for the view that they possessed a 'classic authoritarian personality' and, finally, they seemed 'little different from other members of the community' (p. 176).

Partial support for the socialisation model has been reported by Australian researchers Wortley and Homel (1995). They administered the Beswick and Hills' (1972) Australian Ethnocentrism (E) scale to measure prejudice, as well as Ray's (1972) Balanced F (BF) scale and a shortened version of the Marlowe-Crowne Social Desirability (SD) scale to help control motivational distortion, to 412 recruits at the New South Wales Police Academy at recruitment, after six months' full-time academy training and after 12 months' police experience. There was some evidence that respondents would not acknowledge their ethnocentrism in order to give a good impression. Wortley and Homel found that:

- ethnic recruits and females were generally less ethnocentric than Anglo and male recruits. Also, female recruits were less authoritarian than males
- recruit training reduced authoritarianism
- recruits became more ethnocentric and authoritarian during the field experience. Ethnocentrism increased especially in those recruits sent to police districts with a large Aboriginal population.

Wortley and Homel concluded that police attributes develop as a function of particular policing experience and that training alone is unlikely to overcome the problem of police prejudice. It is unfortunate that Wortley and Homel did not have a control group to test the importation vs socialisation hypothesis. In considering authoritarianism among police officers one should control for age and education. A Canadian study by Perrot and Taylor (1995) compared 123 constables and 36 non-commissioned officers and found that: (a) the latter (who reported significantly greater job satisfaction) were more authoritarian than the former; and (b) education was a significant predictor of authoritarianism (p. 332). Perrot and Taylor's findings would seem to provide some support to the socialisation model.

Worden (1993) did not focus on either ethnocentrism or authoritarianism in her survey of gender differences among 740 police officers (10 per cent females) who had been in the job for no more than seven years in 24 police departments in three metropolitan areas in the United States. Worden reported that, taking relevant variables into account, the gender of a police officer was not related to his/her attitudes (pp. 228–9). The literature discussed provides support for both the importation and the socialisation model of police authoritarian attitudes, while a police officer's gender does not appear of itself to be a relevant variable in this context. Regarding the stages new police officers go through in the early part of

their careers, four were identified in the 1970s by Van Maanen (1973, 1974, 1975), namely:

- 1 *Entry* (why people join and the support they receive while waiting for the selection process to be completed).
- 2 *Introduction* (recruit training at the police academy).
- 3 *Encounter* (in general duties at a police station after the police academy).
- 4 *Metamorphosis* (about six months into general duties the new police officer comes to largely accept the values, attitudes and behaviour of the more experienced colleagues and becomes accepted by them).

Police researchers have also reported that during the first four years of a police career, a police officer exhibits the 'John Wayne Syndrome' (Reiser, 1973)¹³ and, also, that police cynicism increases with time on the job (Niederhoffer, 1967).

2 PREDICTING SUCCESS WITHIN THE FORCE

There are two approaches in using psychometric tests to predict success in the police. One can administer a personality test to serving police officers and examine how their test scores correlate with the same individuals' assessment by their supervisors. This is known as 'concurrent validation'. A better approach methodologically and, consequently more useful approach, is 'predictive validation', whereby the predictive utility of a psychometric test is determined in a follow-up study. Burbeck and Furnham (1985) concluded that neither intelligence nor education guarantee success in the police; in fact, they alluded to the possibility that: 'Higher levels of education may paradoxically give rise to more dissatisfaction and higher wastage' (p. 62), a hypothesis worth testing at a time when more university graduates in western countries are applying to join the police than a few years ago. To the disappointment, perhaps, of police psychologists, Burbeck and Furnham also concluded, as did Lester (1983), that psychological testing does not predict a recruit's later performance and that part of the difficulty may lie in the fact that there is so much variation in what being a police officer entails that: 'it is not necessary to be expected that one common denominator will be found' (p. 64). In addition, there is no consensus on what is meant by 'success' and 'failure' in this context and 'what is needed is a multidimensional, reliable and robust set of criterion measures on which police officers could be judged by superiors, peers and junior officers. Discriminant analysis can then be used to determine what factors discriminate between successful and unsuccessful police officers' (p. 64). The same argument can be made regarding selection of detectives, utilising already available knowledge about the skills and abilities required to carry out the role of a police detective successfully (see McGurk et al., 1994). The need for the kind of research advocated by Burbeck and Furnham (1985) cannot be over-emphasised because psychological testing has

also been shown not to be useful in predicting future performance of police officers even in cases in which candidates are selected for entry into a police force against recommendations based on psychological testing (Lester et al., 1980). In other words, psychological testing at present is not particularly useful in either screening in or screening out police applicants. This conclusion is at variance with Hollin's (1989) more optimistic conclusion on the basis of his review of the relevant literature, namely that psychometric and interview data can predict success at police work but 'the exact predictors of success await definition' (p. 139). Some support for Hollin's conclusion was reported by Bartol (1991), who found in a 13-year-long follow-up study of 600 police officers that a combination of three MMPI scales, yielding an 'immaturity index', was a significant predictor of eventual failure in 75 per cent of the police officers.

Assuming that one can reliably detect deception in law-enforcement applicants using, for example, such widely used tests as the Minnesota Multiphasic Personality Inventory (see Borum and Stock, 1993), paper-and-pencil psychological tests are easy to administer and score, do not cost much money and are usually supplemented with interviews. Since both of these selection methods are shown to have no significant predictive utility, there is a strong argument for making greater use of assessment centres (see Reinke, 1977; Wigfield, 1996). This method is more commonly used to select officers in the armed forces and senior civil service personnel. It usually involves applicants spending two or three days at a centre where they undergo a range of exercises and tests, including job-simulation exercises to ascertain whether they possess qualities required for a particular position. American research into the predictive utility of one such centre for police recruits (Pynes and Bernardin, 1992) found that whereas psychological testing predicted academy performance better than the centre, the latter was better at predicting on-the-job performance. Pynes and Bernardin used one-day assessment, three candidates at a time, a written examination on three role-play exercises and a multiple-choice test after viewing a crime-related video, and required applicants to speak to a homeowner who had reported vandalism. The assessment produced ratings on eight 'skill clusters': directing orders, interpersonal skills, perception, decision making, decisiveness, adaptability, oral communication and written examination (p. 45). Assessment centres have a number of advantages over more subjective methods such as interview panels, primarily because 'they allow a standardised evaluation of a number of different aspects of behaviour, thereby allowing a better assessment to be made of each person's strengths and weaknesses' (Ainsworth, 2000b:53). One limitation of the assessment centre is that because of its nature and financial cost, this method can only be used when selecting a small number of candidates. Nevertheless, given the cost to train a police recruit and the financial and other loss when he/she resigns, or is advised to resign or is found to be corrupt and is prosecuted, more thought should be given by police executives to using assessment centres.

3 ENCOUNTERS WITH THE PUBLIC

The tradition of the police uniform is as old as the history of modern law enforcement. This section draws on a literature review by Johnson (2001). The familiar dark blue paramilitary uniform of the London ‘bobbies’ dates back to 1829 (p. 27). On the basis of social psychological studies of the social significance of clothing in how we perceive someone (Connor et al., 1975), it comes as no surprise to learn that available empirical evidence (cited by Johnson, 2001) indicates the following positive and negative correlates of the police uniform:

- it is the uniform most likely to induce feelings of safety (Balkin and Houlden, 1983)
- in contrast to casual clothes, it conveys an image of a more competent, reliable, intelligent and helpful person (Singer and Singer, 1985)
- the mere presence of a person wearing it induces conformity to traffic regulations (Sigelman and Sigelman, 1976). According to Johnson (2001), however, studies of the influence of a uniform’s colour indicate that: ‘Because of citizens’ negative psychological perception of dark colours, they may perceive a police officer in a negative manner partly because of the officer’s uniform colour’ (p. 31)
- a dirty and/or creased uniform or a badly worn duty belt sends the message to criminal suspects that a police officer is unprofessional and incompetent and, consequently, can invite violence (Pinizzotto and Davis, 1992).

We can see that while the police uniform conveys the power and authority of the person wearing it, it also has a subconscious psychological influence on people the nature of which depends on a person’s preconceived feelings about police officers (Johnson, 2001:31). For this reason, police administrators should think seriously about their policies concerning the uniform.

Police–public relations are problematic in many countries but especially in such multiracial societies as the United States (Nietzel and Hartung, 1993), the UK (Ainsworth, 1995:130–4),¹⁴ Australia¹⁵ and New Zealand. In fact: ‘Complaints arising from police–citizen contacts account for much of the attention police receive’ (Goldstein, 1994:323). Some authors would argue that as psychologists come to play a bigger role in police training, such important skills as listening, counselling, stress awareness, communication, decision making and conflict-resolution skills (Reiser and Klyver, 1987:453) on recruit, sub-officer and officer courses can be transferred to the workplace and improve police encounters with the public (Bull and Horncastle, 1986; Bull et al., 1987). Bull and his co-workers evaluated the human awareness training (HAT) program introduced into the Metropolitan Police’s recruit training in June 1982, which was based on a skills-based model of police training. The focus of HAT has been threefold, namely, to improve ‘interpersonal skills (comprising conversational skills and purposive encounter

skills); self-awareness (comprising self-knowledge through tests and participation in structured experience); and community relations – comprising race awareness and cultural awareness’ (Bull, 1985:109).

The comprehensive five-year-long evaluation of the effectiveness of HAT by Bull and his co-workers (see Bull and Horncastle, 1994, for an overview) was carried out in three phases. Because this research is a very good example of how psychologists can contribute to improving police training by evaluating changes introduced, it will be described in some detail, drawing on Bull and Horncastle (1994). In phase 1, three groups of about 30 officers each completed three questionnaires in week one of recruit training, and at the end of recruit training (week 20), as well as at six months and at 12 months in their probationary period. The three questionnaires were: a social-evaluative anxiety questionnaire (measures social avoidance and distress); a self-esteem questionnaire (measures perceived interpersonal threat, self-esteem, faith in people, and sensitivity to criticism); and an interpersonal relations questionnaire (measures need to establish satisfactory relationships, need to control them and need for affection). In addition, a recruit training questionnaire (RTQ) was administered to two groups of officers ($N = 30$) on the four testing occasions. The RTQ assesses attitudes and behaviours which HAT intended the recruits to acquire.

In phase 2, the first three questionnaires as in phase 1 and a self-monitoring questionnaire (measures amount of self-observation and self-control) were administered to three cohorts of 40 officers at 20, 40 and 66 weeks after initial training, during which time the new recruits were into their probationer training program. In addition, a revised version of the RTQ, subsequently called district training questionnaire (DTQ), was administered to two groups of officers (totalling 61) on the same testing occasions. By now HAT was retitled Policing Skills Training (PST). As part of phase 2, an observational study was carried out by one or two researchers of 64 police officers in eight police stations with 28 to 43 months’ service while on patrol. Observers recorded data on 550 police–citizen encounters. On 50 occasions the observer/s also interviewed the constable concerned and the encountered member of the public separately at the end of the encounter.

Bull and his co-workers found that, generally, HAT trainees were more satisfied with training than were their predecessors and HAT-trained officers attracted fewer complaints during their first three years of service than a matched control group. Regarding the extent to which HAT-trained police officers use HAT skills in their work, Bull et al. (1987) reported a follow-up to 43 months after completing recruit training that found some evidence for the transfer of HAT skills to the workplace resulting in improved police–public relations. Bull (1985) concluded that: ‘of the three components of HAT, “interpersonal skills” is clearly the best; the component described as “self-awareness” is of a reasonable standard; and that described as “community relations” is, as yet, rather poor . . . HAT is a very substantial improvement over that which it preceded. HAT also compares very favourably indeed with training in other forces around the world’ (p. 121).

Regarding the extent to which the effects of PST were manifested in police constables' behaviour, Bull and Horncastle (1994) reported phase 2 of their evaluation found: 'little evidence to suggest that the concepts and skills which Policing Skills Training sought to impart to recruits were significantly undermined by those recruits' subsequent operational experience' (p. 149). Bull and Horncastle identified the following areas which needed to be addressed by the London Metropolitan Police command: (a) enhancement of the self-evaluation and self-awareness components of PST; (b) misunderstandings about the nature and objectives of PST within the force; and (c) enhance officers' understanding and sympathy towards victims.

It is encouraging to be told by Bull and Horncastle (1994) that: 'Since receiving our final report the London Metropolitan Police has acted on all its recommendations' (p. 149). However, the extent to which other police forces in England and Wales have benefited from the experience of the London Metropolitan Police experience with PST is not certain.

The research thus far shows that, unless a systematic program to minimise some negative influences exerted by more experienced colleagues on probationary police officers in the process of being inducted into the police subculture and occupational deviance accompany steps taken to improve recruit training, any improvements in police attitudes and behaviour are likely to be ephemeral.

North American and Australian tourists in the UK are often surprised to find that British police on the beat normally carry no firearms. While the explanation for this characteristic of the British bobby is more historical, British police forces would be well-advised to resist the call to be armed when on duty, in view of the rather low risk of serious physical injury or death to which they are exposed, unlike their patrol officer counterparts in some parts of the United States. Furthermore, there is empirical evidence that the presence of a sidearm has an adverse effect on public perceptions of the police. Boyanowsky and Griffiths (1982) carried out a field experiment to examine weapon presence and eye contact as instigators or inhibitors of aggressive arousal in police-public encounters during the normal course of performing traffic patrol duties. Four constables were recruited in Surrey, British Columbia, for the study. They stopped 87 men and 46 women and told them they were either going to give them a traffic ticket or that they were merely making enquiries and/or making a records check. The constable would be wearing or not wearing a gun and sunglasses. The researcher observed the encounter and straight afterwards gave the motorist a questionnaire to complete. It was found that: (a) a constable wearing sunglasses was perceived more negatively; and (b) motorists who were told they were getting a ticket expressed the most anger on their faces and reported more aggression when the police wore a gun than when no weapon was visible.

There are very few in-depth studies of the effects of police-citizen interaction on attitudes of citizens (Stephenson, 1992:121). One such study by Cox and White (1988) surveyed 460 students who had received a traffic citation and compared their responses with those of 373 who had not. The former were found to have negative

perceptions of the police as far as police demeanour (for example, brutality) but not as far as police competence is concerned. These findings point to the need to differentiate between specific and general public attitudes towards the police.

4 PREJUDICE AND DISCRIMINATION

As criminologists keep reminding us, which behaviours are defined as crime, which offences are focused on and which areas are policed more intensely than others are largely police decisions (Bowling and Foster, 2002:980). However, since the 1950s the legitimacy of the police in various countries has been adversely affected (Bayley, 1994; Morgan and Newburn, 1997) due to discrimination against ethnic minorities, police corruption, miscarriages of justice (see below) and excessive use of force. These events have resulted in less public confidence in the police. The experience internationally leaves no doubt that police stereotypes, prejudice and discrimination are widespread phenomena,¹⁶ resulting in the victimisation of citizens. Police race relations in the UK, France, United States, Australia and New Zealand, to mention but a few, has been a major cause for concern. Furthermore, the international experience shows that minimising police prejudice and discrimination is a Herculean feat.

In the United States in the 1970s and 1980s the police focus on drugs saw the phenomenon of law-enforcement agencies using a racist drug-courier profile. The issue of differential police stop and search for no apparent reason other than a citizen's race or ethnicity resulted in class actions (see *Wilkins v. Maryland State Police* (1993)¹⁷ where research evidence was presented documenting police discrimination against African-Americans. Researchers in various parts of the United States have reported similar findings, for example, in San Diego California (Dvorak, 2000),¹⁸ New Jersey and New York (Ramirez et al., 2000),¹⁹ and North Carolina (Tomaskovic-Devey et al., 2006). Differential police suspicion in traffic stops has also been documented for male as opposed to female drivers, for example, in Miami-Dade County, Florida (Smith et al., 2006). In fact, according to Buerger and Farrell (2002), the singling out of minorities for unwanted attention by the police has a long history in the United States. Racial profiling became so widespread that by the late 1990s it was popularly known as 'driving while black' as police services across the country used racial or ethnic features disproportionately in deciding whom to stop and search for unknown crimes (Harris, 2005). Miller et al. (2008:162) remind their readers that when police tactics are decided on the basis of racist criteria, police risk extreme forms of public resentment, pointing out that such practices can be illegal in international law (Harris, 2002, 2005) and are of doubtful effectiveness as a crime-fighting strategy (Harris, 2002, 2005; Miller et al., 2007).²⁰ Some progress was made in the United States that reduced the incidence of racial profiling as legislation introduced in many states made the tactic illegal and/or a legal requirement was introduced across the country

When police tactics are decided on the basis of racist criteria, police risk extreme forms of public resentment.

for systematic collection of police ethnic data. However, racial profiling has enjoyed increasing support since 9/11 (Amnesty International USA 2004).

Across the Atlantic in Britain, police race relations generally and police treatment of ethnic minorities in particular also leave a lot to be desired, as the case of Stephen Lawrence shows (see case study). There have been about 100 racist murders in Britain in the last 35 years (Phillips and Bowling, 2002:586) – Stephen Lawrence was one of them.

CASE STUDY

Stephen Lawrence

At about 10.30 pm on 22 April 1993, 18-year-old Stephen Lawrence, the son of immigrant parents from Jamaica, was on his way home from a visit to his uncle in Plumstead with Duwayne Brooks, a friend. He hoped to become an architect and was studying A levels. He was crossing the street at Well Hall Road in Eltham in south-east London to check if another bus was coming that would get him home earlier than the one they had just got off. Duwayne called out to Stephen if the bus was coming. On the opposite side of the road there was a group of five or six white youths, known locally and by the police as knife-carriers. 'What, what nigger?' shouted one of the youths and they all set upon Stephen, stabbing him to death. Stephen was yet another victim of racist violence. Two of the suspects were tried in 1996 but were acquitted. The public inquiry into the murder, under the chairmanship of retired judge Sir William Macpherson, confirmed that racism was the sole motivation for the murder and concluded that the police investigation had been undermined 'by a combination of professional incompetence, institutional racism, a failure of leadership by senior officers'.

In Britain,²¹ the riots in Brixton, Tottenham, Toxteth, Handsworth and Moss Side in the 1980s were caused by long-term mistreatment of African-Caribbean people by the police. Regulated by the *Police and Criminal Evidence Act (PACE) 1984*, the police power to stop and search someone can be carried out only when there is 'reasonable suspicion' that stolen property or prohibited articles are being carried. Fitzgerald's (1999) London study of stop and search by police found that 'reasonable suspicion' was frequently absent and that police officers used their power not in order to detect crime (as justified in PACE) but to collect intelligence, for 'disruption' and generally for the 'social control' of predominantly minority ethnic youth. According to Phillips and Bowling (2002), so institutionalised were stops and searches within the police force that until 1997 the Metropolitan Police

used them as a measure of its performance (p. 595). The prejudice that has underlined such biased policing, both overt and subtle, is in fact an expression of racism which, in turn, can be both individual and systemic. A police officer who is prejudiced against African-Caribbeans or Asians will perceive and generally process information about them in a biased way and pre-judge them because of their race on the basis of characteristically negative assumptions and beliefs about them. Confirming research findings reported in the United States, to the list of factors that arouse police suspicion, Quinton et al. (2000) have reported items of clothing.

Negative stereotyping results in discriminative police practices and partly explains why black people are over-represented in annual police arrest and imprisonment statistics (p. 596). One such assumption by the police about African-Caribbean and Asian people in Britain is that they are more likely than whites to use drugs and so police stop and search them more often. Suspected drug-use is the most frequent reason given by the police themselves for their discriminatory stop and search practices. However, the said assumption has been shown to be invalid by self-report surveys (Home Office, 2000; Ramsay et al, 2001). It has also been found that, while in police custody, ethnic minority suspects in Britain are more likely to exercise their legal right to ask for legal advice, to remain silent and to deny the charges against them. This results in a cumulative advantage of such persons in the criminal justice system because by not admitting an offence an individual ensures that the police cannot caution or reprimand him and, in the case of juveniles, will be significantly less likely to be diverted out of the criminal justice process (Phillips and Brown 1998; Bucke and Brown 1997; Home Office 2000). Phillips and Brown also reported that black juveniles were less likely to be diverted out of the criminal justice process even when they admitted the offence. The police worldwide enjoy a great deal of discretion as far as their powers vis-a-vis the public are concerned. When they systematically and chronically abuse the discretionary powers the law gives them in the way they treat ethnic minorities, when they fail to respond in a timely manner to incidents involving members of ethnic minorities, when they fail to record and investigate incidents reported to them and, consequently, fail to bring the culprits to justice, the police alienate minority ethnic communities. It is easy for police to blame those they discriminate against and their culture but, by alienating them, they also reduce their confidence in the police and make it less likely they will assist them with their enquiries. Thus, it comes as no surprise to learn that African-Caribbeans in Britain are less satisfied with police than are whites (Bowling and Philips, 2002).

Police prejudice and discrimination can manifest themselves both when officers decide to stop and question people or even to search and to arrest someone as well as when questioning suspects and interviewing eyewitnesses. It seems that while differential enforcement according to class, ethnicity and gender persists (Choongh, 1997; Chan, 1997), such practices vary from area to area and are not found among all individuals. In this context, police culture is of crucial importance for understanding how the police see their role and the way in which they execute their

duties (Dixon, 1997:9). Prejudice and discrimination also manifest themselves in the way some police officers treat their colleagues who belong to ethnic minorities. It should be noted in this context that the Metropolitan Police did not recruit its first African-Caribbean police officer until 1966 (Phillips and Bowling, 2002:581–582), years after the African-Caribbean community established itself as a migrant community in Britain.

The existence of systemic street-level discrimination by the police on the basis of racial profiling has been challenged by research results (MVA and Miller, 2000; Waddington et al., 2004; Hallsworth et al., 2006) showing that the ‘disproportionality’ phenomenon is accounted for by the greater presence of ethnic minorities on the street at times and places where stop and search takes place, that is, greater availability. The studies mentioned have been criticised, however, for ignoring police selectivity as far as areas chosen for patrol and stop and search activity are concerned. Some British authors (for example, Bridges, 2001) thus shift the focus from the narrow angle of US racial discrimination researchers to the broader concept of ‘institutional racism’, highlighted by the *Macpherson Report*. Using survey data and qualitative interviews, Miller et al. (2008) have examined the experience of Rome vis-a-vis the police in Hungary and Bulgaria and police stops of immigrants in Spain. They found the most excessive ethnic profiling was against immigrants by police in Spain, who routinely stop them because they ‘look like foreigners’ (p. 183), while in Bulgaria and Hungary ethnic profiling was found to apply to pedestrian rather than vehicle stops. Miller et al. concluded that aggregate numbers of stops in Bulgaria and Hungary show no racial profiling involving Romans but mask disproportionality and racist policing among sub-categories of stops such as pedestrians (p. 183). In other words, in Bulgaria and Hungary the concept of disproportionality as used in the United States and Britain to underpin police racial profiling has been found to be problematic. Consequently, researchers in this area should match the social groups they wish to compare on a number of relevant variables (for example, availability on the street and in certain areas of a city at particular times) before they compare them, otherwise they might very well conceal police institutional racism.

Both individual as well as systemic police prejudice and discrimination are very difficult to eradicate because they are often deeply rooted in the society around them and, also, very few of the recommendations in both the 1981 *Scarman Report* and the 1985 *Gifford Report* in the wake of the riots were implemented. Not surprisingly, therefore, we find that police-recorded racist incidents increased from 4383 in 1988 to 23 049 incidents in 1998/9 (an increase of 525 per cent) (Home Office, 1994; Maynard and Read, 1997). Following a scandalous police investigation into the murder in 1993 of black teenager Stephen Lawrence (Phillips and Bowling, 2002), Sir William Macpherson’s (1999) report focused attention on ‘institutional racism’ within the police service. In response to the report, the government’s Action Plan: (a) established a Ministerial Priority for the police service ‘to increase trust and confidence in policing amongst minority ethnic communities’; (b) provided

for a broad range of measures to ‘tidy up’ police handling of racist incidents with reference to their definition, reporting, recording, investigation and prosecution; and (c) introduced measures to enhance police discipline, racism awareness and cultural diversity (Home Office, 1999). Police race relations took another turn for the worse in the UK when rioting broke out in 2001 in north-west England – Oldham (May), Burney and Leeds (June) and Bradford (July) involving South Asian communities. While there is some evidence that measures introduced have helped to reduce differential police treatment of citizens on the basis of one’s race, in 2003/4 African-Caribbean people in England and Wales were thirteen times more likely and Asian people six times more likely than white people to be searched under s.60 of the *Criminal Justice and Public Order Act 1994* which allows the police to search without suspicion in places and at times when they anticipate serious violence or to search for weapons (Phillips and Bowling, 2007:434–435). Since the police have the same power to search without suspicion for ‘articles of a kind which could be used in connection with terrorism’ under s.44 of the *Terrorism Act 2000*, it would be interesting to determine whether the Muslim community in Britain has been disproportionately experiencing anti-terrorists stops and searches as the Home Office minister warned in March 2005 would inevitably happen and that the public should get used to the new ‘reality’ (Phillips and Bowling, 2007:435).

The police occupy a crucial role at the gateway to the criminal justice process and decisions they make have a significant impact on people’s lives as well as on their relatives. However, stereotyping, prejudice and discrimination underpins such decision making. As the experience on both sides of the Atlantic and in the Antipodes shows, minimising police prejudice and discrimination is too serious an undertaking to be left to police alone. Psychologists can contribute to both quantitative and qualitative research into how and why police decisions are taken early on in the criminal justice process as a function of a citizen’s ethnic background, how this affects later decisions as well as the cyclical nature of criminal justice processing and, finally, to ascertain the effectiveness of different measures in reducing police prejudice and discrimination at the individual and systemic level. Regarding police officers themselves, through systematic cross-cultural awareness education their contact with minority ethnic groups can become cooperative rather than competitive if they are encouraged in various ways to view as individuals those they perceive as outgroup members, appreciating the diversity within such communities and, by so doing, thus undermining their own stereotypic expectations and generalisations (Desforges et al., 1991).

5 STRESS

Police associations and police management worldwide are concerned about the long-term effects of stress on their members, which include medical problems, post-traumatic stress disorder, absenteeism, alcohol abuse, marital problems, staff turnover and suicide. The available evidence indicates that it is not uncommon for

police who stay in the job for their working career to continue to experience professional exhaustion, otherwise known as 'burnout' (Oligny, 1994). Kroes' (1985) study of 2300 police officers from 29 different stations or squads painted the following picture of stress indicators: marital problems (37 per cent), health problems (36 per cent), drinking problems (23 per cent), having children with emotional problems (20 per cent) and using tranquillisers (10 per cent). There is a large body of literature on the topic of police stress (Reiser and Klyver, 1987). What follows is an overview of what has been reported about the topic and draws partly on Hollin's (1989) review.²²

Terry (1981) distinguished four categories of stress.²³

- 1 *External* (for example, feeling under siege by an antagonistic public, seeing offenders convicted of serious offences receiving very lenient sentences).
- 2 *Internal* (for example, a feeling that nepotism underpins promotion decisions, feeling there is no hope of promotion, having to be content with obsolete technology). An interesting study of inter-personal trust among 92 officers by Skellington (2001) in Scotland obtained both questionnaire and seem-structured interview data and found that: (a) young officers scored higher on inter-personal trust; (b) lack of trust may be attributed to police experience; and (c) suspicion of the police by 'outsiders' combined with 24-hour police accountability hindered the development of between-police officer trust.
- 3 *Task-related* (for example, emotional burnout due to seeing the dark side of human nature too often).
- 4 *Serious concerns about one's own personal safety* (for example, knowing that there is a high risk of getting shot at in some areas one has to patrol and that there has already been a significant number of both fatal and non-fatal shootings of colleagues). It should be noted in this context that an assumption of dangerousness in police-citizen routine traffic stop encounters by the US Supreme Court (in, *Pennsylvania v. Mimms*, 434, US, 106, 1977) and passengers (*Maryland v. Wilson*, 117 US 882, 1997) has led it to allow police officers during traffic stops to order drivers from their car without suspicion to ensure the safety of police officers. However, Lichtenberg and Smith (2001) examined 10 years of national US data on traffic stops, police homicide and assaults and have cast doubt on the Supreme Court's assumption.

Police officers would appear vulnerable to stress not only because of the very nature of some of their duties (Bull et al., 1983:112–37) but also because one feature of police 'canteen culture' is the macho style that discourages officers from talking about stressors, preferring instead to 'keep a stiff upper lip' – a mechanism which is 'over-used and inadequate' (Manolias, 1991; see also, Pogrebin and Poole, 1991). Regarding the kind of officer most vulnerable to burnout, a Quebec study reported by Oligny (1994) identified the following characteristics: being a perfectionist and highly committed to one's duties, not confiding in others, having a very strong will and, finally, being the type who blames others for his/her problems (p. 23).

A British study by Cooper et al. (1982) of 200 police officers ranging in rank from sergeant to superintendent found that the most significant stressors were: work overload, lack of personal recognition and unfulfilled work aspirations, perceived unnecessary obstacles that undermine the police function and the consequences of autocratic management. Complaints about the police accounted for 2.6 per cent of the variance. Another study of perceptions of stress among random samples of 1125 chiefs and 302 sheriffs in the United States found that: (a) sheriffs reported higher levels of stress than did chiefs; (b) chiefs with greater autonomy and with a perception that they had control over the hiring process reported less stress; and, finally, (c) chiefs with lower levels of education (especially those with a high school diploma or less) were more likely to perceive stress (Crank et al., 1993). As stated in social psychology textbooks, role ambiguity is a major cause of conflict and stress. Tabol and Ainsworth (2000) administered a questionnaire to 30 police officers from a force in northern England and found that role conflict was inversely related to job satisfaction, job satisfaction was inversely related to depression and, finally, that encountering individuals with conflicting expectations in the course of police work was predictive of a police officer's stress score. Utilising the Life Events Inventory and the Bodily Sensations Questionnaire, Gudjonsson (1983) investigated sources of stress experienced by 100 British police officers the previous year, comparing them with a sample of hospital administrators. The three most frequently reported stressors were promotion difficulties, difficulties with their own children, as well as with their spouses. It was also found, however, that the police officers were no different to the hospital administrators in what they had experienced as stressful and what bodily sensations they had as a result. Similarly, Malloy and May's (1984) assessment of the existing empirical evidence led them to conclude, as did Terry (1985), that the stress among police officers may well be exaggerated.

Intuitively, one might expect stress to be related to how long one has been a police member but it turns out that the picture is not so straightforward. Gudjonsson and Adlam (1982) reported that senior ranks were more likely to point to work overload and paperwork as their sources of stress, while the lower ranks cited having to deal with violent confrontations and having to respond to nasty car accidents. These findings show that British police officers, like their US counterparts, experience different sources of stress, depending on their rank which correlates with length of service and type of duties performed.

In an Australian study, Evans et al. (1992) administered the Jenkins Activity Survey (Jenkins et al., 1979) and the State-Trait Anxiety Inventory – Form Y (Spielberger et al., 1983) to 120 Victoria Police and 151 Federal police officers. They found that officers with more than 12 years of service had significantly lower trait anxiety scores even though they scored higher on the hard-driving and competitive dimension of the Jenkins Activity Survey. As Evans et al. point out, these behavioural differences over length of service may reflect changes in how officers perceive their jobs and themselves (see also Perrot and Taylor, 1995) or they may reflect the fact that those who are not happy as police officers, or think of

themselves as unsuitable for the job, simply leave. Interestingly, there is some evidence to suggest that years of experience in the job tend to render police officers 'more accepting of legal restrictions, but also more narrowly focused on crime fighting, more resistant to rules, more inclined to favour selective enforcement, and more motivated by money' (Worden, 1993:221).

In what appears to be a unique study, Alexander and Wells (1991) followed up 91 Scottish police officers involved in body-handling duties following the Piper Alpha disaster in the North Sea in 1988 when 167 men were killed, and compared them with a control group matched for age, sex, marital status and band scores on the Hospital Anxiety Depression (HAD) Scale (Zigmond and Smith, 1983), pre-disaster data (HAD and the Eysenck Personality Questionnaire (Eysenck and Eysenck, 1975) and post-disaster data (Revised Impact of Event Scale – Horowitz et al., 1979, a body-handling questionnaire, and a coping strategy scale). Alexander and Wells reported that the police officers concerned 'emerged relatively unscathed, and some even seem to have gained from the experience' (p. 551). It was also reported that 'over half of the officers found the anticipation of what was facing them more stressful than the work itself' (p. 553) and that humour and talking to colleagues were the ways most officers found useful in coping with the experience (p. 550). In accepting Alexander and Wells' findings, however, a certain degree of caution is warranted because of the lack of normative data for Eysenck's lie scale. This means that the absence of significant evidence for stress as a result of the body-handling experience may be due to some police officers lying in accordance with the macho image but not being detected by the lie scale. In view of the increasing number of women serving as police officers in many jurisdictions today, it would be interesting to know whether they experience the same stressors as their male colleagues. An early small study in northern California by Wexler and Logan (1983) found that women patrol officers' stressors had to do with working in a male-dominated police service. A later study by Bartol et al. (1992) in a small town reported that, while male and female police officers experienced the same external stressors to a large extent, women officers were most affected by the violence they encounter in the course of their work and its consequences on people.

Regarding stress management, there is no shortage of advice on how to both recognise stress (Ainsworth and Pease, 1987) and how to cope with it (see Ainsworth and Pease, 1987; Stein, 1986)). Police management in many a country nowadays offer police officers counselling to cope with job-related stress. Counselling is discussed by Bull et al. (1983), who also recommend relaxation, meditation, dietary control and exercise. They also argue that, 'organizationally much can be done to reduce the risk of stress and strain by obviating role conflict and role ambiguity, and by managing job content and work loads' (p. 134). Both junior and senior officers themselves made the following suggestions for police command on how to reduce stress (Gudjonsson and Adlam, 1982; Gudjonsson, 1983): (a) better training on how to cope with demanding situations; (b) greater support from senior colleagues; (c) better familiarity with police procedures; (d) improved

police–community relations; and (e) fewer bureaucratic obstacles. For such suggestions to be implemented, changes at an organisational level are needed (Ainsworth and Pease, 1987). Finally, the goal of police officers should be to identify job-related stress reactions early so that, if need be, their families too, can receive effective professional assistance before such problems as alcohol abuse, marital problems, prescription drug abuse, deepening difficulties and muted emotional reactions have their toll (Sheehan and Van Hasselt, 2003).

6 QUESTIONING SUSPECTS

The police clear-up rate for major/indictable/index crime is generally low in western countries. This is especially the case with property offences. In those jurisdictions with an adversarial system, the major role for the police is to construct the case for the prosecution (Sanders, 1987).²⁴ While police officers generally spend a small proportion (13 per cent) of their time during a tour of duty on tasks related to crime enquiries/investigation, historically, being a detective confers status on a police member, especially if he/she happens to belong to an elite squad of detectives. A British study by McGurk et al. (1994) used questionnaires and interviews to collect data from 334 detectives in four police forces (the Metropolitan, Greater Manchester, Hertfordshire and Cambria Constabulary), and found that in 98 per cent their work involved interviewing.

Not surprisingly, therefore, one of the core attributes expected of a good detective is detecting a lot of crime by being effective and efficient at questioning suspects. A significant number of criminal suspects confess, and obtaining a confession is strategically important because police are more likely to formally charge a suspect and to end up with a conviction. Therefore, it comes as a big surprise to be told that questioning suspects is a skill that, despite its importance and the availability of textbooks on how to go about the task (see, for example, Inbau et al., 1986; Royal and Schutt, 1976; Yeschke, 1993), is apparently poorly taught even to detectives and that the whole process of suspect questioning has traditionally been rather inadequately supervised (Irving and Hilgendorf, 1980; Stephenson, 1992). The reader should note in this context that historically in the UK police officers received no formal training in how to question suspects and they had to rely on observing their more experienced colleagues (Moston and Engleberg, 1993). In fact, it was not until 1992 that the Association of Chief Police Officers for England and Wales published the first national training program for interviewing witnesses and suspects (Central Planning and Training Unit, 1992), known as the PEACE interview model, that is, planning and preparation, engage and explain, account and clarification, closure and evaluation. Subsequently, PEACE was developed into a more advanced interview model known as ‘specialist interviewing’ (SI). Griffiths and Milne (2006) reported a study of whether advanced SI training works with PEACE-trained police officers. They found that SI training improved their interviewing skill and, furthermore, the improvements transferred to the workplace.

An interactive computer program has been jointly created by interviewing and interrogating instructors from the FBI's Academy and members of the Johns Hopkins University's Applied Physics Laboratory which simulates an interrogation. Its purpose is to enhance basic and important skills (see Einspahr, 2000). Dubious practices of police investigators are reduced when police are legally obliged to have the questioning tape-recorded, as is the case in Britain and Australia (Heaton-Armstrong, 1995b; Shepherd, 1995). Since the late 1980s, the Homicide Squad of the Victoria Police in Australia routinely conducts its questioning of suspects on video and such evidence is admissible in court. If there is a reasonable basis for suspecting that someone has committed an offence, police are required by law to caution the suspect before questioning them. Such a legal requirement, of course, does not stop police questioning a suspect outside a police station (for example, in a police car), or in the cells, or before the tape-recorder or video camera is switched on (see Torpy, 1994). According to Moston (1996), this suspicion is reinforced by the finding that most admissions in the study by Moston et al. (1992) tended to be at the start of the interviews. Research by Irving and McKenzie, 1988, 1989) established that the use of some interviewing ploys declined following the *Police and Criminal Evidence Act (PACE) 1984*²⁵ which introduced the tape-recording of police interviews with suspects in Britain, although the number of admissions of guilt by suspects did not decline (Moston and Stephenson, 1993). Incidentally, in the United States an undercover officer in the prison context is not required to caution another inmate when asking them questions (see chapter 9). Gudjonsson (1992a) provides a good discussion of the literature on the broad topic of police questioning of suspects, as does Stephenson (1992). This section draws on both these reviews as well as on the work of other researchers.

Apparently, a high proportion (48 per cent) of suspects who are subsequently convicted and imprisoned initially deny their involvement in crime and a number (41 per cent) are unwilling to confess when first questioned (Gudjonsson and Bownes, 1992). However, a significant proportion of suspects questioned by police make full or partial admissions/confessions. Softley et al. (1980) reported that 47.6 per cent of the 218 suspects questioned at four police stations in England made full confessions while an additional 13.4 per cent made partial confessions. A number of factors appear to be important in whether suspects confess. Research with prisoners in Britain (Moston, 1996), in Iceland (Gudjonsson and Petursson, 1991) and in Northern Ireland (Gudjonsson and Bownes (1992) has identified three reasons why suspects confess: (a) proof (that is, the strength of the evidence against the suspect); (b) internal pressure (that is, a need to tell the investigator about the crime); and (c) external pressure (for example, police persuasion, fear of confinement).

A significantly higher admission/confession rate for suspects without a criminal record has been reported by Neubauer (1974) and Softley et al. (1980) but Baldwin and McConville's (1980b) study of confessions in London and Birmingham reported the opposite trend. The likelihood of a confession decreases significantly as a suspect's age increases.²⁶ Moston et al. (1992) found that when there is

strong evidence against a suspect, juveniles are more likely to deny an allegation, while older suspects are more likely to neither admit nor deny (p. 36). Finally, with the notable exception of Baldwin and McConville (1980b), it has generally been found that property offenders are significantly more likely to make an admission or confession than those charged with crimes against the person (Mitchell, 1983; Neubauer, 1974). It is quite possible, of course, that the higher confession rate of property offenders (who are known to be highly prolific as far as their criminal activity is concerned) can be attributed to their following a practice whereby they agree to confess on the understanding that the police will take other offences into consideration.

In examining correlates of making a confession one needs to also take into account whether a suspect has had legal advice before being questioned by the police, a factor that has been found to significantly reduce the likelihood of a confession (Moston et al., 1992, also see below). Finally, in considering studies of false confessions it is important to take into account the types of criminal cases examined (that is, whether serious or minor) and, in the case of England and Wales, whether a study was carried out before PACE was introduced in 1984. Its introduction has been of tremendous significance in regulating police practices in the UK as far as questioning suspects is concerned. Dixon (2006) has drawn attention to the positive potential of such regulation but reminds his readers that regulating police practices is much less likely to be effective if the police are under irresistible pressure to apprehend and convict the culprit/s, if the suspect they question is so stigmatised and, finally, if it is a case of risk and security (p. 346).

Section 60 of Code E of PACE provides that: the code of practice itself shall be readily available for consultation by police officers, detained persons and members of the public at every police station to which an order under s.60 applies (E.1). Code E provides detailed guidance for:

- audio-recording of interviews at police stations
- recording and the sealing of master tapes
- the interview (commencement, special warnings to be given, interviews with the deaf, objections and complaints by the suspect, changing recording media, taking a break during the interview, failure of recording equipment, removing recording from the recorder during the interview, and conclusion of the interview)
- after the interview: Media security. On 26 May 1989, Lord Lane CJ, sitting in the Court of Appeal (Criminal Division), issued a practice direction concerning the preparation of evidence of tape-recorded interviews for court²⁷
- Code E (4C) provides that a suspect who is interviewed after arrest fails or refuses to answer certain questions, or to answer them satisfactorily, after due warning, a court or jury may draw a proper inference from this silence under sections 36 and 37 of the *Criminal Justice and Public Order Act 1994*. In that context, however, in the case of *Murray v. UK* (22 EHRR 29 at 67, ECHR),

the European Court of Human Rights held that delaying access to legal advice, whatever the justification, is incompatible with the right to a fair trial guaranteed by Article 6 of the *European Convention on Human Rights*.

Horgan (1979)²⁸ defines the goals of interrogation as including: (a) learning the truth of the crime and how it occurred; (b) securing an admission or a confession of guilt from the suspect; (c) obtaining all the facts in order to ascertain the *modus operandi* and the circumstances of the crime; (d) collecting information that will enable the investigators to draw logical conclusions; and (e) furnishing the prosecutor with the evidence required.

Available literature on police questioning techniques almost exclusively describes procedures used by law enforcement in the United States ‘where the legal restrictions on questioning show a marked difference to those set out in PACE’ (Moston, 1996:93). Law-enforcement agencies (Skolnick, 1982)²⁹ and the courts³⁰ in the United States consider deception of suspects during questioning to be a natural part of questioning. This is in stark contrast to the emphasis on investigative interviewing by the police in Britain, the ethical basis on which police training is based – the result of a shift over a number of years from coercive questioning practices to a new ethos of ‘searching for the truth’ (Sear and Williamson, 1999:69). Leo (1994) informs us that police use four psychological techniques of influence: persuasion, deception, neutralisation and normalisation. On the basis of his participant observation field study of more than five hours in three police departments, Leo (1996) concluded that contemporary US police interrogation ‘can be best understood as a confidence game based on the manipulation and betrayal of trust’ (p. 259). Moston (1996) lists the following feedback persuasive techniques and psychological ploys, that are commonly used by British police interviewers when suspects who have made an initial denial, both in the absence of evidence and in the use of evidence:

- in the absence of incriminating evidence: simple repetition of the suspect’s answers, commenting on the suspect’s body language³¹ and expressing sympathy for the victim
- when incriminating evidence is available: emphasise victim or independent witness evidence, accomplice evidence.

Using 18 cases in which the suspects had been interviewed by police in connection with serious criminal offences between April 1991 and July 1996, Pearse and Gudjonsson (1999) examined whether more powerful and hostile dynamics are utilised by police officers in England and Wales to overcome a suspect’s resistance. They examined the importance of 33 variables and found that the police resorted to manipulative coercive tactics, namely: intimidation, robust challenge, manipulation, question style and soft challenge. They also found that the nature and frequency of the tactics used was related to the likelihood that the courts would rule the evidence inadmissible.

Con/scam/bunco artists/fraudsters pose a special challenge for police interviewers because they feel no remorse for obtaining money or some other financial advantage from people by deceiving them, are confident, intelligent, accomplished liars and it is difficult for the prosecution to prove *mens rea* (guilty intent) in deception offences (O'Neal, 2000:17). However: 'With the proper preparation and strategic approach on the part of investigators, evidence produced from subject interviews of con artists can become the key to successful prosecutions' (p. 17). The unusual fraudster in the case study that follows proved very difficult when questioned by Victoria Police Major Fraud Group detectives in the early 1990s in Melbourne, Australia, about her criminal activities (Krambia-Kapardis, 2001).

CASE STUDY

An untypical fraudster who proved difficult to question

The A\$1 250 000 fraud was committed by a 47-year-old grandmother accountant who had been dismissed by her previous employer for committing fraud. Acting out of greed, she exploited weak internal accounting controls. A lack of segregation of duties enabled her to be both in charge of personnel records as well as responsible for paying salaries. She defrauded her employer of the stated amount by means of fraudulent transactions. Using a variety of methods to cover up her frauds, she misappropriated cheques issued by her employer, a foreign government, and had them paid into her own account. She did this by getting subordinates to sign 'pay cash' cheques or by forging cheques to alter the amount stated to a larger amount and had the difference paid into her account. She also misappropriated bills (meant to pay employees' salaries) upon their maturity by adding 'or pay cash'. She believed she had a very good chance of getting away with her frauds. With a salary of only A\$27 000 and employment of about 10 years the offender managed to own four houses in her name, buy another two for family members, pay school fees for grandchildren and to hold cash deposits of A\$1 million. It is unknown why a number of her assistants or even upper management cooperated with her and banked the cheques or even authorised the alterations. No charges were laid against those people. She was found out by the bank when she tried to have a bill paid into her own account that had already been paid. When interviewed by the police, she first appeared naive and used the language barrier as an excuse not to communicate. Her command of English improved miraculously when she was confronted with numerous discrepancies between her account of how she came to so much wealth and the evidence in the hands of the police. She showed no remorse and remained confident she would get away with it through all the police interviews. Fortunately, the documentary evidence she had left behind was irrefutable and she went to prison.

O'Neal (2000) provides practical advice on how best to question a con artist, including: thorough preparation for the interview; having an inexhaustible supply of patience and listening very carefully to the first extract the subject's own full story; confronting him/her with discrepancies between what the investigator knows to have happened and what is claimed has happened (starting with minor issues first); elicit more incriminating admissions; and, finally, elicit broad statements of confession. Basically, the investigator offers the con artist ample opportunity to talk freely, knowing that self-confidence will most likely compel him/her to continue the deception during the interview, thus furnishing the investigator with the opportunity 'to elicit significant proof of criminal intent in the form of false exculpatories and admissions' (p. 21).

In the light of criticisms levelled against British police interviewing skills over the years, an attempt has been made to identify skill gaps in specialist investigative interviewing (see Bull and Cherryman, 1995). It has been necessary first, however, to provide a generally agreed working definition of 'specialist investigative interviewing' (SII). Bull and Cherryman analysed, both quantitatively and qualitatively, data from 194 police officers from 13 forces in England and Wales and have reported the following definition of SII: 'The fair questioning or facilitative interviewing by a well-trained, experienced officer with "in-depth" knowledge of a specific area, of a suspect, witness or victim in offences of a special nature or in unusual circumstances' (p. ii).

In recent years in western countries there has been a shift away from physically coercive to psychologically manipulative tactics in police questioning of suspects. Interrogation is nowadays referred to as 'interviewing a suspect' to denote a shift that is part of a large change in policing, whereby social control has become more subtle, more sophisticated, yet potentially more dominating than in the past. The shift has paralleled legislative changes and concomitant changes in police standing order and codes of practice.

There is no shortage of advice on how to interrogate criminal suspects (Buckley, 2006; Inbau et al., 1986, 2001; McDonald, 1993; Ord and Shaw, 1999; Palmiotto, 2004).³² Exponents of the Reid Technique encourage investigators to interview the suspect in order to decide whether he/she is guilty or not and, when it is evident that the suspect has not told the truth, to proceed with the investigation in order to obtain a confession (Buckley, 2006). It is also emphasised that during the interview stage the police officer establishes and maintains rapport with the suspect (Tousignant, 1991; see St-Yves, 2006, for five basic rules). According to Tousignant (1991), a prerequisite for a successful interrogation is for the interrogator to 'treat suspects in a civilised manner, no matter how vicious or serious the crime might have been' (p. 16). Another essential rule stated by the same author is for the 'investigator to be compassionate towards the suspect' (p. 16). Such treatment is said to encourage suspects to be 'open, forthright and honest'. Tousignant's (1991) basic premises are these.

- Committing a crime gives rise to psychological and physiological pressures in people that they are motivated to alleviate by communicating and explaining the circumstances under which the crime was committed. In other words, ‘most suspects feel a need to confess’ (p. 17). Empirical evidence supporting this view has been provided by Gudjonsson and Bownes (1992), who found that 56 per cent of the prisoners they surveyed in Northern Ireland had confessed to the police because of an internal need to ‘get it off their chest’.
- Suspects confess when their internal anxiety caused by their deception is greater than their perceptions of the consequences of the crime (p. 17).³³
- A guilty individual who confesses is, from the start, looking for the ‘proper opening during the investigation to communicate their guilt to the interrogators’ (p. 17).³⁴ Fear of punishment combined with a loss of pride in confessing to a crime inhibit suspects from communicating their guilt (p. 17).
- To communicate about the circumstances of the crime, suspects must feel comfortable during the interrogation and have confidence in the investigator. Two basic qualities of a good interrogator is being a good listener and allowing suspects to describe in their own time and words the circumstances surrounding the crime.
- To overcome a suspect’s inhibitions about communicating the circumstances of a crime, questions should focus on what motivated the suspect to commit the crime and not on the crime itself. This encourages the suspect to begin to rationalise, to explain what made them do it.
- When suspects make an admission, however insignificant, it indicates a breakthrough in the interrogation because the suspect’s ‘defence mechanisms are diminished, and at this point, the investigators may push through to elicit the remaining elements of confession’ (p. 17).

One basic assumption made by Tousignant (1991) is that: ‘Both the hard core criminals and first-time offenders suffer from the same pangs of conscience’ (p. 17). The validity of this assumption, however, is questionable.

In the British study of SII by Bull and Cherryman (1995) a questionnaire was constructed on the basis of in-depth interviews with 93 police officers experienced in SII. The officers concerned were asked what skills they considered to be the most important in officers who conduct SII as well as in themselves. ‘Listening’ was found to be considered the most important in SII. Bull and Cherryman also found that the skills that were most often missing in police officers who conduct SII were said to be ‘preparation’, ‘open-mindedness’ and ‘flexibility’.

Assuming we have a good interrogator (that is, one who possesses both good intelligence and understanding of human behaviour, is skilled at getting on with other people, is patient and persistent; Inbau et al., 1986, cited by Gudjonsson, 1992a:29) and a suspect who is willing to communicate with the investigator,

what approach should one follow to secure a confession? Inbau et al. (1986, 2001) recommend a total of nine steps.³⁵

- 1 Direct positive confrontation.
- 2 Theme development (for example, to reduce an emotional suspect's guilt or to assist a non-emotional suspect to see the futility of continuing to deny his/her part in the crime).
- 3 Handling denials.
- 4 Overcoming objections.
- 5 Procurement and retention of a suspect's attention.
- 6 Handling the suspect's passive mood.
- 7 Handling the suspect's 'resenting an alternative question'.
- 8 Having the suspect 'orally relate various details of the offence'.
- 9 'Converting an oral confession to a written confession.'

The last step would be unnecessary in jurisdictions that provide for the tape-recording and, in some cases, video-recording, of police interrogations, usually for the more serious crimes termed felonies/indictable offences. Of course, adequately documenting and reporting a confession with a signed statement is essential for securing a conviction (Burke, 2001). But what can psychologists tell police investigators about the process of questioning itself?

Well-known British academics and psycholegal researchers Memon et al. (2003) have criticised the nine-steps interrogation model of Inbau et al (1986, 2001) on the grounds that: a confession allowed by trickery and deceit would not be allowed in a UK court; using trickery and deceit is both unethical and may well result in false confessions (see below); exerting pressure on suspects to confess may well have the reverse effect; if people are tricked into confessing they resent it long afterwards; bluffing is a poor interview technique; getting confessions by unfair means may well be generalised by police to other contexts and cause PTSD in vulnerable suspects; and, finally, Inbau et al.'s technique relies excessively on non-verbal cues to deception (see chapter 8). Memon et al. point to three important characteristics of an interview put forward by Baldwin (1992), namely: planning, rapport-building and social skills, shown by subsequent research with police detectives (Soukara et al., 2002; Williamson, 1993) to be very important in conducting interviews with suspects without the need to resort to trickery, deceit and to rely on non-verbal cues to deception; in other words, a significantly less oppressive method. As the same authors point out, Inbau et al.'s questioning technique 'is aimed at impressing the suspect and breaking down the resistance of the suspect' (p. 67). Another interrogation technique used in the United States is the improving interpersonal evaluation (IIE) interview. Drawing on Frank et al. (2006), the IIE method incorporates what is known about good police interviewers – excellent communicators, good listeners, good at establishing rapport with suspects, good observers of verbal and non-verbal cues to deception (see chapter 8).

Unlike Inbau et al., for Stephenson (1992),³⁶ interviewing is basically a question-and-answer information-gathering exercise and 'interviewing skill may be evaluated in terms of the interviewer's success in eliciting relevant and accurate information' (p. 125). It follows that the interviewer may be unsuccessful in obtaining relevant and accurate information and/or a confession if he/she conducts the interview on the basis of unfounded assumptions and/or does not allow the suspect enough opportunity to give a full account of their position vis-a-vis the crime. At the same time, a suspect who provides the interviewer with a plausible but untruthful account, or says very little or even says nothing, can undermine the success of the interview. To illustrate, Evans and Webb (1991), two serving British police officers, analysed a random sample of 60 tape-recorded interviews by police on Merseyside in May 1990 of male and female suspects aged 10–16 years. It was found that interviews of children and young persons in which a parent, guardian or other responsible adult would often be present, take a lot less time – an average of 7 minutes compared with 21–22 minutes for adults. As Evans and Webb point out, this finding may well be due to the presence of others during the interview and/or the police having decided to caution the child or young person and, consequently, wanting to 'get it over and done with as quickly as possible'. The same researchers also found, however, that the police interviews in their sample exhibited 'a rather didactic, and dismissive, handling of the interviewees who spoke for about a third of the woefully short period of time' (p. 45).

A common concern of detectives is having to cope with a suspect who simply refuses to answer their questions, and especially one who does so while being tape- or video-recorded. What, then, can a detective do in response to the 'no comment' problem? How can he/she overcome the suspect's resistance? According to Shepherd (1991a), an investigator should remember that it is not only suspected offenders who resist questioning; the aetiology of resistance is much more complex. Shepherd argues that appropriate conversation and conversation management help an investigator to cope with resistance. This strategy entails: 'respect for the person, empathy, supportiveness, a non-judgemental attitude, straightforward talk and a conversational style signalling a commitment to talk across as equals, not up-down or as pseudo-equals' (pp. 6–7).

Shepherd maintains that the following are conducive for creating resistance in suspects: poor conversation management; inappropriate pacing (impatiently rushing in as soon as the suspect has answered a question); inappropriate forms of assertion and listening (that is, disruptive talk, overtalking, counterproductive questions, inappropriate listening, (for example, assuming the answer before it is given)); inappropriate content of assertions, which lead the suspect to the conclusion that the interviewer does not have sufficient knowledge about the crime, or what he/she knows about it is rather vague. Such practices by the interviewer, Shepherd argues, result in 'alienation, antipathy, mistrust, loss of confidence in the interviewer and loss of interviewer credibility and loss of self-confidence' (p. 9). One major reason why police investigators find it difficult to cope with a suspect who does not answer

their questions is the fact that ‘the general pattern of investigative training – as exemplified by CID training – is not training to develop skills but crash courses in the law and procedures’ (p. 11). As Moston et al. (1992:38) pointed out, most British police officers receive no interview training and, in fact, training courses are a relatively new development ‘which is still under-researched and under-resourced’ (p. 38). However, Moston et al.’s observation is less valid today because significant progress has been made in England and Wales in training police officers, including new recruits, in suspect-interviewing skills.

How Police Officers Approach the Task

Stephenson and Moston (1991, 1994) and Moston et al. (1992) reported a large study of police questioning of suspects at 10 Metropolitan Police stations in London. The researchers investigated a consecutive series of 50 or more interviews of suspects by detectives at each police station, giving a total of 1067 cases, ranging in seriousness from minor offences to rape and murder. Each detective was asked to complete two short questionnaires – one before and one after the interview. It was found that in the majority of cases the detectives’ aim was to secure a confession as either main evidence or additional evidence (Stephenson and Moston, 1991:30). It was also found that most interviewing officers (73 per cent) were sure of the guilt of the suspect they were interviewing before the interview got under way, largely on the basis of their perception of the strength of the evidence against the suspect. Officers were particularly prejudiced against suspects with previous convictions (p. 32).

In their research for the British Home Office, Bull and Cherryman (1995) analysed 69 videotaped recordings of interviews with suspects provided by a number of different police forces that fell into the category of SII. Four experienced analysts independently rated each interview for the overall skill with which the police officers concerned carried out the interview as well as whether the interview was or was not characterised by 29 factors. Bull and Cherryman reported that the most common weaknesses found in the interviews were the failure to use pauses and silences, the lack of rapport, the lack of empathy/compassion, inflexibility, and the use of leading questions; and that what differentiated those interviewers rated as skilled with those not rated as skilled were communication skills, flexibility and empathy/compassion-showing (p. iii). A more recent study by Soukara et al. (2007) analysed a sample of 50 audio-taped interviews with suspects to examine associations between interviewer skills, whether suspects confessed and suspects’ behaviour. Five experienced raters independently listened to the tapes and rated them (significant inter-rater reliability was found) for the usage of 17 tactics, six skills and four suspect behaviours commonly mentioned in the literature. The tactics used most frequently were open questions, disclosure of evidence, repetitive questioning, leading questions, handling suspects’ mood and positive confrontation. A statistically significant relationship was found between the more skilful the interviewer, the greater the level of suspect cooperation and responsiveness and

the less resistance. Sukara et al. concluded that the interviewers were found to be using some appropriate tactics and skills that had been judged as missing in earlier similar research in the 1990s, an indication that the updated (in 1996) PEACE philosophy and police training were having an effect. Finally, it is comforting to know that the same researchers found that unethical tactics (for example, maximisation, minimisation, intimidation and situational futility) were not present in the tape-recorded interviews analysed.

Regarding how effective British detectives are in getting suspects to confess, findings reported by British confession studies before PACE was introduced (Softley, 1980) and after (Moston and Stephenson, 1994; Pearse and Gudjonsson, 1996) reported admission rates ranging from 49–61 per cent; the duration of police interviews lasting 20–30 minutes (Vrij, 2003); and, finally, that most suspects are cooperative (Baldwin, 1993; Moston, Stephenson and Williamson, 1992). It should also be noted in this context that, as far as adolescent suspects are concerned, on the basis of their study of 152 young defendants in the United States, Viljoen et al. (2005) reported that younger ones (aged 15 or less) were more likely than older ones (aged 16–17) to confess and waive their legal right to counsel; however, their legal decisions were not predicted by the strength of the evidence. Such findings stress the vulnerability of pre-adolescent suspects when questioned by police as suspects. Stephenson and Moston (1991) reported that there was no statistical relationship between a detective's assumption of guilt and the outcome of the interrogation. Although London detectives would probably like us to think otherwise, 'few suspects were "persuaded" to confess' (p. 33). Furthermore, the decision to admit an allegation during the interrogation was in the main associated with three factors, namely, strength of evidence, legal advice and the criminal history of the suspect (Moston et al., 1992). Full admissions were found to drop 20 per cent in cases where a suspect had made contact with a solicitor (Moston et al., 1992:36). Further support for the importance of the strength of evidence against a suspect in whether he/she confesses to a crime has been reported by Gudjonsson and Bownes (1992). They found that proof was the factor most commonly (60 per cent) given by the prisoners they surveyed for making a confession to the police which they did not subsequently retract.

Whether a suspect has a criminal record is another relevant factor in this context. Suspects in the Moston et al. study with a criminal record were 20 per cent less likely to make an admission, even in the face of strong evidence against them – 59 per cent of them did compared with 78 per cent of the first offenders. There was also significant variation between different police stations in the percentage of suspects who admitted allegations put to them during questioning. This is an interesting finding that awaits an explanation. Virtually all of the suspects who confessed were charged but detectives favoured female suspects in that they were significantly less likely to be charged (53 per cent) compared with male suspects (66 per cent). Finally, the same study also found that the style of questioning differed depending on the strength of the evidence against a suspect. In cases where the evidence was strong, detectives used accusatorial questioning strategies; where the

evidence was weak, information-gathering strategies (for example, asking open-ended questions) were more likely to be used (Moston et al., 1992:38).

The experience of criminal suspects of police questioning methods internationally provides myriad examples of sheer police brutality, more so in some countries than in others. It is generally the case that for most suspects the interrogation context is still rather coercive without the need for manacles, handcuffs and hoods (Gudjonsson, 1992a; Stephenson, 1992:129). The suspects may be physically exhausted, embarrassed, harbouring a strong sense of guilt, very anxious and feeling at a disadvantage vis-a-vis the police investigators. Realistically speaking, the interrogator has control of the situation and can determine whether a suspect gets rewards or is punished, he/she is in a position to manipulate the information available to the suspect about the evidence against them in order to increase the suspect's level of anxiety and lead to the conclusion that there is no sense in continuing to deny his/her involvement in the crime. From the present author's knowledge of many hardened career criminals, and on the basis of discussions with detectives in different police forces, there is a minority of criminal suspects who have had extensive experience of being interrogated, have read books on the subject, do not mind lying (and some of them can do so very convincingly) but may prefer to say as little as possible and, finally, the worst punishment if they are charged – prison – does not worry them in the least. Most people, however, would find the experience of being questioned by police as a suspect for a crime a rather unpleasant one. Legislation in the UK (*Police and Criminal Evidence Act, 1984*, and relevant Practice Codes) with the requirement that interrogations be tape-recorded, has been shown to reduce police use of coercive tactics (Irving and McKenzie, 1988).³⁷ Interestingly, the same researchers reported that such reduction does not lead to a reduction in the proportion of suspects who confess. Similar legislation has existed in Australian jurisdictions since the late 1980s but their impact on police questioning practices remains to be ascertained.

Interrogative pressure, of course, is a double-edged sword in the hands of the interviewer since it has been shown to sometimes have a boomerang effect. Gudjonsson (1995c) describes four cases (two incest, one murder and one conspiracy to commit sexual offences) that show that 'interrogative pressure can result in a marked shift in lowering subjects' suggestible behaviour' (p. 317). Utilising Ofshe and Christman's (1986) 'two-process theory', Gudjonsson states that his finding 'can be interpreted . . . as an effective discontinuation of reactive behaviour and activation of strategic coping' (p. 317). As far as theoretical models of confessions (that is, the suspect accepts responsibility for the crime and gives a detailed narrative account of his/her actions) are concerned, Gudjonsson (2003a) reviews the following six models of confession that have been proposed.

- 1 *A decision-making model* (Hilgendorf and Irving, 1981): suspects consider the different options available, estimate the probability they will occur and consider the consequences of adopting each option.

- 2 *The Reid model* (Jayne, 1986): builds on Inbau et al.'s (1986) nine steps of interrogation to account for the process by which a suspect's resistance to the questioning and denial of the crime break down.
- 3 *Psychoanalytic models* (for example, Reik, 1959; Rogge, 1975): basically rests on the assumption that offenders feel remorse and have an unconscious compulsion to confess in order for the super-ego to resolve a conflict between one's ego and id.
- 4 *An interaction process model* (Moston et al., 1992): posits that a confession comes about as a function of the interaction effect of (i) a suspect's background (for example, personality, age, offence type), (ii) case characteristics (for example, strength of police evidence, legal advice given the suspect), and (iii) the questioning method used by the interviewer.
- 5 *A cognitive-behavioural model* (Gudjonsson, 1989): a confession is the outcome of a relationship between the suspect, the environment and 'significant others within that environment' (Gudjonsson, 2006:136), against the backdrop of both antecedents and consequences of confessing for the suspect.
- 6 *The Ofshe–Leo model* (Ofshe and Leo, 1997b): posits that confessions can be adequately explained by oppressive police questioning.

Gudjonsson (2003b) proposed an interactional model of the interrogative process that focuses on three categories of factors, namely: police factors (custodial pressures, interrogative pressures, personality of interviewers), vulnerabilities (physical health, mental health, psychological vulnerabilities) and, finally, support (solicitor, appropriate adult).

7 FALSE CONFESSIONS³⁸

As mentioned in chapter 8, some police investigators feel confident they know how to 'spot a liar' on the basis of 'obvious' clues, coupled with an assumption that most suspects routinely lie. Interviewer bias against the suspect and the coerciveness of the whole questioning context and process has been shown to occasionally result in false confessions, especially by suggestible suspects (Torpy, 1994). Ainsworth (1995:41) describes the case of George Heron in north-east England who in 1993 was cleared of the murder of a 7-year-old girl. He had confessed to the murder after four days' of intensive police questioning and after other members of his family had also been arrested by the police. He claimed he decided to make a confession to the police to put an end to what the police were doing to him and members of his family. But how accurately can people identify a false confession when they see one? Kassin et al. (2005) had college students and police investigators watch or listen to prison inmates confessing to crimes. Half of the confessions were true and half were false. It was found that students were more accurate than police (who, interestingly enough, were significantly more confident in their judgement) and accuracy rates were higher in the audiotape than in the videotape condition.

While the idea of interrogative suggestibility goes back to Binet (1900), the results of empirical studies and a number of highly-publicised miscarriages of justice, such as the Birmingham Six and the Guildford Four, in which defendants were convicted and served terms of imprisonment largely on the basis of having confessed to crimes while undergoing interrogation by police, has focused attention on pressures on police investigators to be successful and some dubious practices by police, as well as on the question of the voluntariness of confessions and some suspects' vulnerability to falsely confessing to a crime. There can be no doubt that a confession is one of the strongest forms of evidence that influences the outcome of a criminal trial. However, as McCann (1998:441) reminds us, tension is endemic within the criminal justice system because of the need, on the one hand, to protect individual rights and, on the other, the need to protect the public from violent criminal offenders. Not surprisingly, therefore, confessions during police interviews have become a source of controversy. The psychology of confessions by suspects has attracted a great deal of attention on both sides of the Atlantic since the early 1980s. Gudjonsson (1992a, 2003b, 2006) provides a very comprehensive discussion of the topic of false confessions and this section partly draws on his work (see also Kassin, 1997).

As for how frequently false confessions occur, Richardson (1991)³⁹ reported that 23 per cent of 60 juveniles in a residential forensic unit, who apparently had no ulterior motive to lie, claimed to have made a false confession to the police, largely out of loyalty and in order to protect a peer or a friend (48 per cent). Gudjonsson and Sigurdsson's (1994) study of 229 prison inmates in Iceland (a country with an inquisitorial legal system) found that 12 per cent of the inmates claimed to have made a false confession in the past during a police interview and the majority of them (78 per cent) were subsequently convicted of the offence in question. Female inmates were approximately three times more likely to have made such a claim; most (78 per cent) had not retracted their alleged false confession because they considered it futile to do so, 52 per cent said they had made a false confession to avoid police pressure or in order to get out of police custody, while slightly less (48 per cent) of them did it to protect someone else. Gudjonsson and Sigurdsson concluded that their findings 'corroborate the results of Richardson (1991) among adolescent delinquents in England and suggest that false confessions do occur with greater frequency than is commonly believed' (p. 24). One crucial issue that Gudjonsson and Sigurdsson do not really address is the truthfulness of the claims made by the inmates.

In the course of an interrogation an investigator is usually in control of the situation and in a position to place psychological demands on a suspect, communicate excessive expectations and, also, manipulate the suspect's emotions, especially since: 'Suspects are never quite sure of exactly what information investigators possess' (Tousignant, 1991:15). Experimental evidence shows that being told that one should remember certain non-existent facts in a memory task results in some subjects accepting more false clues relating to those facts than if no such

expectation is communicated and the interview contains no such demands (Gudjonsson and Hilton, 1989). With a combination of the experimenter effect, the coercive circumstances of being questioned in a police station (Irving and Hilgendorf, 1980), a suggestible suspect (for example, one low on self-esteem and/or of low intelligence)⁴⁰ and investigators who are bent on securing a confession, a false confession becomes a real possibility. Some authors have expressed strong concern about the reliability of confessions made by drug users while intoxicated or under the influence of drugs or suffering from withdrawal symptoms or drug-induced illnesses (Davison and Forshaw, 1993). The same concern has been voiced about the reliability of confessions made by individuals of low cognitive ability when questioned by the police (Torpy, 1994).

Following the quashing in March 1991 by the Court of Appeal in England of the conviction for murder of the Birmingham Six, the Royal Commission on Criminal Justice was established and given a brief to scrutinise the operation of the criminal justice system, to examine how effective it was in securing the conviction of the guilty and the acquittal of the innocent against the backdrop of efficient use of resources. To assist the Commission in its task, the British Home Office funded 22 research reports.⁴¹ One of the research projects was that by Gudjonsson et al. (1994), who investigated the psychological characteristics of adult subjects before being interviewed by the police in order to identify those vulnerable to interrogative suggestibility and thus at risk and candidates for safeguards provided in the *Police and Criminal Evidence Act (PACE) 1984*. They interviewed an unbiased sample of 156 suspects at two London police stations. About two-thirds of the suspects had previous convictions and more than one in three had already served a prison sentence. Seven per cent of the suspects were found to be suffering from mental illness, 3 per cent from mental handicap, 3 per cent were illiterate and 2 per cent had language problems; in other words, 15 per cent were vulnerable to suggestibility. The police, who were somewhat unlikely to identify those suspects suffering from clinical depression, only summoned an appropriate adult to be present during the questioning (as provided in PACE) in only 4 per cent of those cases. There was some evidence that Afro-Caribbean subjects were more suggestible than others. Gudjonsson et al.'s findings emphasise the need for operational police to be trained and to have clear criteria for identifying mental disorder and suggestibility.

Gudjonsson and McKeith (1988) distinguished three kinds of false confessions:

- 1 *A voluntary false confession*: in this case, one confesses falsely for one's own very good reason and without having been pressured to do so. Possible reasons in this context might be a wish by an individual to be in the limelight, to be punished or to cover up the real culprit.
- 2 *A coerced-compliant false confession*: here, someone agrees to make a confession which they know to be untrue in order, for example, to avoid further physical pain, or to be allowed to sleep, or to go home, or on a promise that

the investigator/s will ‘have a word with the magistrate/judge’ about a lenient sentence.

- 3 *A coerced-internalised false confession*: in such cases suspects come to believe that they are guilty because they no longer trust their own memory of certain details (see Ofshe, 1989, for details of how this kind of confession can be constructed by an interrogator).⁴² Later on, of course, such a person may come to realise that they falsely confessed but it may be rather late because a retracted confession has been shown to still influence jurors.

Five types of false confessions are distinguished by Ofshe and Leo (1997a, 1997b): (i) voluntary false confessions; (ii) coerced-compliant forced confessions (caused by police pressure during questioning); (iii) stress-compliant false confessions (that is, brought about by the interview situation); (iv) non-coerced persuaded false confessions (same as what Kassin, 1997, calls ‘coerced-internalized confessions’, whereby suspects come to believe as a result of police tactics that it is more likely than not they have committed a crime, undermining their belief in the own memory performance); and (v) coerced-persuaded false confessions (a hesitant believer in a false recall is convinced to confess to the crime in question). However, it is worth remembering in this context that not all false confessions can be blamed on police questioning. Howitt (2002:243) mentions ‘voluntary false confession’ to describe cases, for example, when people anonymously confess falsely over the phone to the police in connection with police investigations into a serial killer, or when young members of gangs are forced by older members into confessing to a crime committed in the belief that younger defendants (for example, juveniles) are sentenced more leniently by the courts, what McCann (1998a, 1988b)⁴³ calls ‘coerced-reactive false confession’. Other ways of classifying false confessions⁴⁴ are ‘proven false confessions’ and ‘disputed false confessions’ (Gudjonsson, 1999), ‘unsafe confessions’ (Gudjonsson et al., 1999) and, finally, ‘proven’, highly probable’ and ‘probable’ (Leo and Ofshe, 1998).

Gudjonsson and Clark (1986) put forward a theory of suggestibility (see Gudjonsson, 1992a:116–30) that postulates that ‘most people would be susceptible to suggestions if the necessary conditions of uncertainty, interpersonal trust and heightened expectations are present’ (p. 121). Implicit in such a model is the assumption that interrogative suggestibility is a distinct type of suggestibility (Gudjonsson, 1992a:123). Gudjonsson also points out that: ‘Suggestibility is, to a certain extent, influenced by situational factors and experience’ (p. 163). Gudjonsson has constructed a suggestibility scale (Gudjonsson Suggestibility Scale (GSS) – now there is GSS1⁴⁵ and GSS2)⁴⁶ but, as he himself acknowledges: ‘One of the most difficult questions with regard to suggestibility relates to the extent to which one can generalise from a GSS test score to a trait concept of interrogative suggestibility’ (p. 164). The GSS, developed for both research and clinical purposes, consists of 20 statements that are answered either ‘true’ or ‘false’ and, finally, the items are loaded on two factors: (a) avoidance of conflict and confrontation; and (b) eagerness to please. Fifteen of the questions are leading and five are not leading.

Gudjonsson (1984) tested his scale by comparing the GSS score of 12 alleged confessors and eight resisters. The former group made confessions during police interrogation that they subsequently retracted. The latter group were defendants who continued denying their crime involvement even though there was forensic evidence linking them with the crime. Gudjonsson found that resisters scored less on the GSS. Gudjonsson admits two limitations of that study: the small number of subjects in each group and that the differences in IQ between the two groups could have influenced their suggestibility scores. Stephenson (1992:132) pointed out two more limitations: that 'the scores of the false confessors fell within the normal range of scores on this test'; and 'What has to be explained is the remarkably low scores of the deniers (that is, people who deny having committed a crime), most of whom, it almost has to be said, were found guilty of the offence with which they were charged'. When examining whether the GSS discriminates reliably between those who are high and those who are low on interrogative suggestibility one needs to also take into account such relevant factors as whether suspects are first offenders or recidivists used to being questioned by the police, as well as whether suspects have received legal advice before being questioned (see above).

Gudjonsson and Lebegue (1989) reported evidence supporting the validity of the GSS in the form of a higher score by a man who had confessed to the murder of a close friend he was subsequently shown not to have committed. Gudjonsson (1991) reported further evidence that the GSS reliably differentiates between resisters ($N = 20$) and false confessors ($N = 20$) as far as suggestibility and compliance are concerned, controlling for age, sex, intelligence and memory capacity. Gudjonsson (1989) found that suggestibility assessment discriminated between resisters and confessors. Gudjonsson (1991) does admit, however, that 'it is almost certain that not all of the alleged false confessors in the present study are innocent of the crime with which they were charged' (p. 151). It will be interesting to know what became of the four false confessors whose cases were pending at the time. It needs to be remembered in this context that a suspect's suggestibility is not the only factor relevant to whether he/she successfully resists the interrogator's suggestions and pressures but it 'is undoubtedly due to the combination of situational and interrogational factors on the one hand, and the suspect's mental state, motivation, personality and coping ability, on the other' (Gudjonsson, 1992a:157).

As far as predicting the likelihood of a confession is concerned, Pearse et al. (1998) used the GSS and biographical data to assess 160 suspects for a number of factors (including psychological vulnerability) when they were detained at two London police stations but before they were interviewed by police. They found that:

- Vulnerable suspects were no more likely to confess than non-vulnerable suspects. As the researchers admit, their finding may be attributable to the fact that they were dealing with minor cases and little pressure was put on the suspects by the police to confess.

- Suspects were more likely to confess if they reported having taken an illegal drug in the previous 24 hours.
- Younger suspects were more likely to confess.
- Suspects interviewed in the presence of a lawyer or who had experience of prison or custodial remand were less likely to confess.

However, Pearse et al.'s failure to control for the strength of incriminating evidence against the suspect may well have confounded their results (Kebbell, 1999).

Gudjonsson et al. (2000) asked 86 consultant psychiatrists, 26 forensic medical examiners, 87 lawyers and 121 police officers to complete a questionnaire concerning a suspect's fitness to be interviewed according to psychological vulnerabilities that had to do with his history of mental problems and current problems with communication (p. 78). The most commonly identified vulnerabilities were: confusion and disorientation, withdrawing from heroin, communication problems, a paranoid belief, and not appearing to understand simple questions. In contrast, the respondents did not think the following factors rendered the suspect unfit to be interviewed: claiming amnesia, depression, appearing suggestible and eager to please.

Sigurdsson and Gudjonsson (2001) reported a study of 509 prison inmates in Iceland that examined the extent to which psychological ($N = 17$), criminological and substance abuse variables ($N = 16$) differentiate between alleged false confessors (12 per cent of the sample) and other prisoners. Discriminant function analysis revealed that two factors (number of previous criminal convictions and the score on the Gough Socialization Scale of the California Psychological Inventory; Megargee, 1972) correctly classified 93 per cent of the non-false confessors and 32.3 per cent of the alleged false confessors. Sigurdsson and Gudjonsson concluded that their findings suggest that antisocial personality characteristics and the number of previous terms of imprisonment are the best predictors of Icelandic offenders claiming to have made a false confession to the police and, finally, that among Icelandic prisoners, making a false confession is a feature of their criminal lifestyle. Some support for the predictive utility of the GSS1 has been reported by Redlich and Goodman (2003) who used an experimental simulation paradigm⁴⁷ to investigate the suggestibility of three age-groups (12- and 13-year-olds, 15- and 16-year-olds, and 18–26-year-olds) and found that: (a) the two younger groups (that is, juveniles) were more likely than the adults to falsely confess; in fact, the youngest age-group confessed the most, both when they were presented with 'false evidence' and when they were not; and (b) scores on the GSS predicted compliance (that is, admitting having pressed the forbidden key) but not internalisation (that is, believing they had pressed a forbidden key on the computer). Differences in personality and mental state between suspects and witnesses immediately after being interviewed by police have been reported by Sigurdsson et al. (2006) in an Icelandic study. Building on the knowledge that witnesses to a crime resemble ordinary members of the public, and suspects resemble prison inmates in terms of their personality, they administered: the Eysenck Personality Questionnaire (Eysenck and Eysenck, 1975), Gough

Socialization Scale (Megargee, 1972), Gudjonsson Compliance Scale (Gudjonsson, 1997), Rosenberg Self-Esteem Scale (Rosenberg, 1965), Beck Depression Inventory (Beck et al., 1996), Beck Anxiety Inventory (Beck and Steer, 1993a) and the Beck Hopelessness Scale (Beck and Steer, 1993b) to 47 suspects and 31 witnesses at four of the largest police stations in Iceland. Sigurdsson et al. reported that four of the suspects claimed to have made a false confession to the police due to their immediate need or psychological problems and, also, that suspects were significantly more depressed, hopeless, compliant and personality-disordered than witnesses, characteristics that place them at risk of making a false confession. As Sigurdsson et al. conclude, their study 'raises concern about the mental state of suspects interviewed by police and the frequency [8.5 per cent] with which they reported having made a false confession to the police' (p. 626).

Evidence challenging the validity of the GSS1 has been reported by Bain and Baxter (2000). While a number of studies have concerned themselves with interviewees' or suspects' characteristics that would predispose them to make a false confession, there is limited literature on the role of interviewer behaviour. In an experimental study that used mainly psychology undergraduates as subjects Bain and Baxter (2000) tested the hypothesis that the greater the psychological distance created between the interviewer and the interviewee by a general demeanour adopted throughout the interview, the higher GSS1 scores will be. Subjects were administered the GSS1 under a friendly or an abrupt interviewing condition. They found that two of the GSS1 measures appear to be biased significantly by interviewer style. Those tested in the 'abrupt' condition gained higher scores for 'shift' and 'total suggestibility' than those in the 'friendly' condition. If Bain and Baxter's findings are replicated Gudjonsson would need to seriously consider revising his suggestibility scale. The reader should note in this context that it is very difficult to adequately reproduce the police questioning of suspects in the laboratory because, as Redlich and Goodman (2003:154) remind us, it is ethically problematic to accuse a subject in a laboratory experiment of having committed a criminal offence.

In view of the emphasis by law-enforcement personnel on obtaining a confession from criminal suspects, the empirical evidence for the use of coercion that results in coerced confessions and false confessions, the crucial significance of a confession as far as the outcome of trial is concerned and the evidence for interrogative suggestibility, some authors (for example, Wakefield and Underwager, 1998) maintain that expert testimony may be necessary to help jurors understand the circumstances that lead to non-voluntary confessions.

For his part, Shepherd (1991b) argued that unethical police interviews of suspects are founded on valuing expediency (p. 48), proposed a change of approach in how police interviews are conducted and outlined the following six principles of ethical interviewing: the prior investigation, sincerity, disclosure, open-mindedness, tolerance and the integrity principle.

Such moral principles, if adhered to by criminal investigators, would go a long way in eliminating improper practices during police questioning of suspects. The

experience in England and Wales since the Police and Criminal Evidence Act (PACE) was implemented in 1986 shows that there have been fundamental changes to the ways suspects are treated and questioned at police stations. The wide acceptance of investigative interviewing and the great emphasis on identifying suspects' psychological vulnerabilities and needs so as to maximise the reliability of their accounts to the police (Gudjonsson, 2003a), testifies to a significant success by British legal psychologists in bringing knowledge to bear on law reform and impacting in a practical way to improve the treatment of suspects by the police, thus contributing to reducing the risk of false confessions. Even those who still have some pragmatic reservations about some of Shepherd's (1991b) moral principles, many would probably agree with him that: 'Doing the job in response to a call to cope with a rise in crime or to catch the perpetrator of an outrageous crime can never be taken to be a licence to act with expediency when dealing with information or with people' (p. 55).

Preventing False Confessions

Since the adversarial system of justice is not a search for the truth, the police rely excessively on the interrogation of suspects with the purpose of obtaining a confession to clear up crime and prosecute offenders successfully. However, as the official enquiry into the Stephen Lawrence case in Britain (Macpherson, 1999) stressed, police incompetence and occasionally police corruption underpin miscarriages of justice. According to Gudjonsson (2003a), in 22 miscarriages of justice cases the Court of Appeal considered seriously psychological evidence pertaining to suggestibility and compliance. To illustrate, in the very well-known Birmingham Six case, the four persons who confessed scored higher on the suggestibility and compliance scales than the two who did not (Gudjonsson, 1992a). Even though the issue of whether interrogative suggestibility is a personality attribute (Gudjonsson, 1997, 2003a) or rather the result of situational factors such as inappropriate police questioning (Milne and Bull, 1999), the experience in England and Wales since the Police and Criminal Evidence Act was introduced more than 20 years ago allows a number of conclusions to be drawn about ways to minimise miscarriages of justice, namely:⁴⁸

- separate the role of investigation from that of prosecution, that is, have an independent prosecution service⁴⁹
- forensic science laboratories should be independent of the police⁵⁰
- legislate to regulate police questioning of suspects in custody. More specifically, the role of the police should be changed, by legislation such as PACE and its Codes of Practice, from that of interrogation of suspects to secure a confession to an impartial investigation to establish the truth, utilising investigative interviewing and approaching the interview process with an open mind and, thus, fairly

- the prosecution should have the onus of proof that nothing has happened to make a suspect's statement unreliable and not the defence to show that something has happened in the interrogation room that renders the suspect's statement unreliable⁵¹
- provide for the tape-recording or video-recording of police interviews of suspects and interviews of witnesses, especially vulnerable witnesses⁵² (see chapter 4)
- suspects should be entitled to free legal advice and to have their lawyer present when being questioned
- introduce a national training program that is mandatory for all police officers to enable them to meet the challenge of investigative interviewing and to change police culture as far as questioning of suspects is concerned
- legislate to mandate the disclosure by the prosecution of all material collected during a police investigation into a crime, thus making the whole process transparent and accountable⁵³
- introduce a criminal cases review commission⁵⁴ tasked with reviewing all claims of miscarriages of justice and referring to the Court of Appeal those that satisfy the test provided.⁵⁵

The US Supreme Court's ruling in *Miranda v. Arizona*, 384 U.S. 436 (1966)⁵⁶ notwithstanding, having a federal constitution means there can be no legislation equivalent to PACE for the whole country (Williamson, 2004:51). Consequently, the people of the United States do not have the benefit of a national legal framework regulating police questioning of suspects in custody that is strictly enforced by judges as is the case in the UK and they lack many of the safeguards against miscarriages of justice mentioned above. This unsatisfactory state of affairs and convincing evidence about the contribution of police and prosecutor misconduct from research into known miscarriages of justice in the United States (Scheck et al., 2000) makes the argument for the abolition of the death penalty in all states even more compelling.

8 PROFILING OFFENDERS

Generally speaking, criminals are caught by police for one or more of the following reasons: they confess to the crime; another criminal gives the police useful information about a crime; they are arrested red-handed, chased and caught by police; an eyewitness describes them; forensic evidence (that is, fingerprints, footprints, DNA etc.) at the crime scene or their handwriting is linked to them; or, finally, because the police link a number of crimes committed by the same offender. In today's large urban centres all over the world the work of police detectives is becoming increasingly more difficult, calling for more sophisticated techniques as criminals become even more adept. Films such as *Silence of the Lambs*, television series like

Cracker in the UK, *CSI: Crime Scene Investigation*, *CSI: Miami* or *Profiler*, and popular books like *The Real Cracker* by Stephen Cook (2001)⁵⁷, *The Jigsaw Man* and *Picking Up the Pieces* by Paul Britton (1998, 2001) have popularised criminal profiling.⁵⁸ In addition, some well-known retired FBI profilers (for example, John Douglas, Roy Hazelwood, Robert Ressler) have published their own books about some of their experiences in helping law-enforcement agencies catch serial killers.⁵⁹ Different terms are used to refer to profiling of offenders in the context of police investigation including ‘psychological profiling’, ‘criminal personality profiling’, ‘crime scene analysis’, ‘criminal investigative analysis’, and ‘crime-linking’. According to Bartol and Bartol (2004a),⁶⁰ psychological profiling was used by the Office of Strategic Services (OSS) during World War II, having been predated by the fictional detective character Sherlock Holmes by Sir Arthur Conan Doyle towards the end of the nineteenth century. A very important point about ‘psychological profiling’ is made by Holmes and Holmes (2002) in the preface to their book, *Profiling Violent Crimes: An Investigative Tool*, that by the term they mean ‘sociopsychological profiling’ because ‘a thorough profile is more than a personality sketch’ – *inter alia*, it encompasses such sociodemographic data as age, race, gender, occupation and education.

Douglas et al. (1986) proposed a definition of profiling that is widely accepted, namely, ‘a technique for identifying the major personality and behavioral characteristics of an individual based upon an analysis of the crimes he or she has committed’ (p. 143). Recently attempts have been made to identify the qualities of successful profilers. The work of Kocsis and his coworkers (see Kocsis et al., 2000, 2002; Kocsis, 2003a, 2003b, 2004) supports the view put forward by FBI profilers Hazelwood et al. (1995) that successful profilers have especially logical minds and an appreciation of the criminal mind. However, a Canadian study by Bennell et al. (2008) had 36 subjects aged 19–54 years complete a mock profile exercise and the Watson-Glaser Critical Thinking Appraisal – Form S. They found no correlation between subjects’ critical thinking score and their profile accuracy. However, in view of limitations of laboratory-based studies (see Bennell et al., 2006), as Bennell et al. (2008) themselves stress, future researchers need to consider more carefully how profiling occurs in real-life settings (p. 154).

Gerberth (1981:46) in his book *Practical Homicide Investigation* talks about profiling as an educated attempt to supply law-enforcement investigators with specific information about the person who is likely to have committed a particular crime. According to the same author, profiling is more likely to yield useful knowledge in crimes where the offender is unknown to the victim and has left behind evidence of psychopathology (for example, particular injuries to the victim, objects or writing) or the crime/s appear/s motiveless. Let us next take a look at FBI profiling before considering profiling based on quantitative analysis, including geographical profiling. (For detailed treatment see Ainsworth, 2001b; Holmes and Holmes, 2002; Jackson and Bekerian, 1997).

FBI Profiling

The FBI profiling method is widely known as ‘psychological profiling’. An early example of the involvement of a profiler to assist the police with an investigation was in the news in 1956 in New York City when psychoanalytic psychiatrist James A. Brussel (1968) came up with a list of characteristics of the person likely to be the ‘mad bomber’ – (middle-aged, heavy, single, living with a sibling and wearing a buttoned-up double-breasted suit) – on the basis of a crime scene examination and letters written by the bomber. When a number of years later the ‘mad bomber’, George Metzky, was arrested by the police, he fitted Brussel’s description to the last detail. The concept of psychological profiling was expanded in the 1970s as a result of research into a number of serial violent offenders, including serial killers, by members of the Behavioral Sciences Unit at the FBI Academy in Quantico, Virginia. Their aim was to be able to infer the primary motive and the personality of the person likely to have committed one or more crimes from a detailed examination of the crime scene and all the information available about the victim, the crime/s, the forensic evidence and autopsy reports; in other words, to provide the investigators with a description of some important demographic characteristics, including lifestyle, the type of personality of the likely culprit and whether the crime was one of a series of crimes by the same offender, thus assisting in the apprehension and questioning of the offender (Hazelwood and Douglas, 1980). The Unit’s research focus, which has come to form the foundation of psychological profiling as practised today, was on the crimes, motivations, personalities and behaviours of 32 serial killers (almost exclusively sexual) they interviewed in prison, on the assumption that every offender commits a crime in a certain way and leaves his signature at the scene of the crime. The methodology used combined low-level quantitative analysis and utilised the Unit’s own collective experience over the years with constructing offender profiling. On the basis of that work, a database was constructed that allowed the FBI researchers to propose a typology of such offenders into ‘organised’ and disorganised’ and, for rapists, ‘selfish’ and ‘unselfish’ etc.⁶¹ An ‘organised’ killer shows planning of the crime/s and control at the scene of the crime, leaving very useful clues behind as to his demographic characteristics, personality and motive. An organised murderer would thus be expected⁶² to be intelligent (but a likely under-achiever), with good interpersonal skills, sexually competent, living with a partner and appearing ‘normal, but harbouring an antisocial or psychopathic personality, who has probably been experiencing anger at about the time of the killing, been depressed, and follows media accounts of his murders (Ainsworth, 2001b:101) and may well return to the scene of the crime. By contrast, a disorganised murderer is a totally disorganised individual as far as his appearance, lifestyle and psychological state are concerned.⁶³ Profilers also advise police investigators on how to question the suspects when they arrest them. According to Holmes and Holmes (2002), during the interview an organised murderer should be confronted

directly, while a disorganised one will be more likely to respond to police questioning if the interrogator empathises with him, establishing a positive personal relationship (pp. 75–6).

The FBI psychological profiling, also known as ‘crime scene analysis’, has been criticised for: being based on weak social science methodology (Howitt, 2002:199); relying largely on the individual profiler’s intuition and, consequently, not being objective, let alone ‘scientific’ (Ainsworth, 2001b:102); and, finally, that two profilers using the same crime scene analysis data will often produce different profiles. An offender profile is about one of the tools available to police detectives tasked with the investigation of a serious crime or series of crimes. The criticisms levelled against the FBI’s psychological profile method must be weighted against its contribution, sometimes in bringing to justice serious criminals who terrorise whole communities. Also, we should not forget that profiling is but one tool available to police investigators. As Stevens (1997) reminds us: ‘Crime is not solved by magic. Crime is solved by hard work and determination on the part of highly skilled and professional police officers, often working with equally professional colleagues in the scientific, medical and legal fields’ (p. 77). It has been shown time and time again that a highly skilled and experienced profiler can assist police investigators immensely in catching serious offenders. At the same time, the police can be sent on a wild goose chase by an inaccurate profile. The risk of a misleading psychological profile is reduced if the expert concerned is well-versed in personality theories which alone cannot produce psychological profiles but can facilitate the profile production process (Boon, 1997:59). Rejecting intuition as a basis for profiling, other criminal analysts have utilised but, also, developed, statistical techniques (for example, smallest space analysis) for analysing offence, offender, victim and situational characteristics, what Howitt (2002) terms ‘statistical/actuarial’ profiling with its emphasis on empirically-based classifications and linkages between them. In fact, a number of computerised databases on offences and offenders have been established, Violent Crime Linkage Analysis System (ViCLAS) being the most recognised and internationally used (Grubin et al., 2001). Let us next consider statistical/actuarial profiling.

Statistical/Actuarial Profiling

In a recent study of serial homicide in Italy by Santtila et al. (2008), Mokken scaling⁶⁴ and discriminant function analysis were used to analyse data from court files and media reports in order to investigate the behavioural crime link using observable crime features (offence and victim characteristics) of a total of 116 homicides committed by 23 individual offenders between 1970 and 2000. Santtila et al. reported 62.9 per cent classification accuracy of the cases, showing the potential usefulness of such crime analysis to police investigators. Statistical profiling has been applied to a broader range of offences than psychological profiling. A lot of the research in this area has been carried out at the Centre for Investigative Psychology

at Liverpool University in England under the guidance of David Canter, known to many for his contribution to police investigators in the case of Peter Duffy, the 'railway murderer', who in the 1980s carried out a series of terrifying rape and murder attacks on women in London and the Home Counties. As a result of the Duffy case the Home Office established a sub-committee on offender profiling chaired by John Stevens (Stevens, 1997:87).

CASE STUDY

Profiling armed robbers

In an effort to develop a typology of armed robbers, the present author in the late 1980s analysed police and prison file data pertaining to 100 inmates serving sentences for armed robbery in Victoria, Australia (Kapardis, 1989). In addition, lengthy face-to-face interviews were carried out with all the inmates themselves to probe their thinking and decision-making processes before, during and after the robbery. The main aim was to examine possible associations between the type and number of offenders involved, the type of target, weapons used and injuries to the victim. Qualitative data analysis supplements results obtained from quantitative data analysis and can thus yield a profile that is more useful to the police. Summarising the results of the study, it was found that: two-thirds were aged 25 years or less and, having left school by the time they were 15 years old (78 per cent), most (66 per cent) were first convicted at 16 or younger, with 71 per cent being sent to a youth training centre upon conviction; the majority (80 per cent) were tattooed and three-quarters possessed no employment skills; the majority (63 per cent) did very little planning, if at all, before committing an armed robbery and, especially, if three or more offenders were involved. Also, while in 82 per cent of the robberies there were no physical injuries to victims, a victim was most likely to sustain injuries if the crime was committed by a gang of three who were more likely than lone or pairs of armed robbers to have been drinking before and to attack 'soft' targets at night armed with weapons, and to use their weapons. Finally, the majority only travelled around three miles (5 km) from their place of residence to attack a target. Following release of some of the study's findings to the media, the present author was pleasantly surprised when the following morning he received a telephone call in his university office by the then Officer-in Charge of the Armed Robbery Squad in Melbourne, a very experienced 'no-nonsense' detective inspector, who expressed interest about the profile constructed.

The study of 'criminal actions from an objective, often statistical viewpoint rather than one based on personal intuition and clinical experience' (Canter and Alison,

2000:1) has been applied, for example, to burglaries,⁶⁵ armed robbery,⁶⁶ arson⁶⁷ and theft at work.⁶⁸ Salfati and Canter (1998) examined the relationship between murder crime scenes and the characteristics of the murderer in their study of a sample of 82 homicides in England in which a single offender attacked a stranger.⁶⁹ Canter and Alison (2000:7) have argued that such statistical offender profiling can be seen as a natural part of 'investigative psychology'.

No offender profile would be complete, of course, if it did not include important features of the offender's environment, his movements in time and space. The interest in the ecology of crime can be traced to the Chicago School (see Shaw and McKay (1942) which emphasised the fact that crime (in their case it was delinquency) was concentrated in some areas of the city, a finding that led them to postulate 'social disorganisation' as a cause of delinquency. It is widely accepted that most offenders, including serial killers (see Canter, 1994), do not travel very far from their place of residence to commit their crimes and detailed mapping of crime locations, patterns and trends, a method known as 'crime mapping' which uses a computerised technique known as 'geographical information system' (GIS) and can provide police investigators with very useful information about suspects. The reader should note in this context that there is geographical profiling (that is, spatial movement analysis of a single serial offender) and geographical mapping (that is, special patterns analysis pertaining to a number of offenders over a period of time). The main idea behind geographical profiling is to offer investigators probability estimates where a suspect's residence might be. A computer program known as Criminal Geographic Targeting, developed by Rossmo (1995) analyses the special characteristics of an offender's crimes to produce a topographic map, assigning probabilities to different locations where the suspect may be residing or have his base for offending.⁷⁰ Drawing on Rossmo (1997), a geographic profile can be used in combination with a psychological profile to help investigators have a fairly good idea who they should be looking for. Of course, not all types of offenders or offence types can be geographically profiled. While the three-dimensional analysis of locations and movements is the result of a computerised quantitative analysis, how one reconstructs and interprets the offender's mental map is subjective (p. 161).

Geographical profiling also enables the production of hunting typology for predatory criminals, breaking the serial killer hunting process into two components, namely: (a) the search for a suitable victim, and (b) the method of attack. Rossmo (1997:167) has identified four victim search methods: *hunter* (goes in search of a victim), *poacher* (searches for a victim away from the area he normally frequents), *troller* (while doing something unrelated, encounters a victim and, availing himself of the opportunity presented, attacks the victim) and, finally, *trapper* (puts himself in a situation where he comes across victims over whom he has control). He also identifies three methods of victim attack: *raptor* (comes across a victim and right away attacks her), *stalker* (follows the victim and then attacks) and, finally, *ambusher* (entices a victim to a location the offender controls such as his car, flat,

shop). Having a geographic profile, the police can decide which investigative strategies⁷¹ to use in order to be more effective and efficient. The reader should note that the notion of a 'mental map' is of significance both in Rossmo's geographic profiling as well as in Canter's work on rapes and homicide. Ainsworth (2001b:127) defines 'mental maps' as 'internal representations of the external world, and are unique to each individual.' Based on their work on the locations of offenders' crimes, Canter and his co-workers (see Canter and Larkin, 1993) proposed the Circle Theory of Environmental Range according to which, especially serial rapists and homicide offenders, the majority of offenders live within a circle, a radius that encompasses their offences.

The different profiling techniques described draw on a variety of disciplines, including personality theory, criminology, environmental psychology and geography. However, as Bekerian and Jackson (1997:209) rightly point out, such techniques are so diverse that there is the danger of the field of offender profiling fragmenting due to differences in methodological frameworks, differences between individual profilers and differences in culture (for example, between the UK and the United States). Such fragmentation would impact adversely on the accessibility of application of offender profiling. At the same time, it could also be argued that within offender profiling there are opposing factions that are also so described in textbooks: inductive vs deductive, clinical vs statistical or practitioner vs academic approaches. This separation into factions is understandable in view of the ill-formed forensic field internationally and, also, the relatively short history of offender profiling and how it has evolved in different countries with different police cultures and policing traditions. However, as Alison et al. (2004) have argued, the separation into different factions is both unrepresentative and unnecessarily divisive and, consequently, it undermines the potential contribution of behavioural sciences to an important part of police work – criminal investigation. Adopting a pragmatist's stance, Alison et al. maintain that what is called for is a more productive and synergistic dialogue between exponents of the different approaches to offender profiling. In the same vein, the present author believes that if well-known profilers espousing different methods work jointly to provide answers to the same questions and they strive to produce hybrid profiling methods, it would be one way of avoiding offender profiling fragmentation.

9 PSYCHOLOGY OF TERRORISM

The ramifications of the terrorist attacks on 11 September 2001 will continue to be felt in the United States and around the world for a long time to come. At the time of the attacks, the computerised Assisted Passenger Pre-screening System (CAPPS) (Armstrong and Pereira, 2001) – which uses basic information provided by passengers when they reserve and buy tickets – flagged two of the four hijackers on American Airlines Flight 77 (that later crashed into the Pentagon) when they checked in at Dulles Airport, Washington DC, on the morning of 9/11. According

to Bartol and Bartol (2004b:70), even though their bags were scanned before being loaded onto the plane, the two men were neither questioned nor searched.⁷² Madrid in 2004 and London in July 2005 also experienced devastating terrorist attacks. The suicide bombings carried out in London were the first in Europe. Four suicide bombers, three of them British-born, detonated bombs during the morning rush hour, killing 52 people and maiming and injuring over 700 others. Drawing on the existing empirical literature, especially the work of Andrew Silke, John Horgan, and Sela-Shayovitz and Yellin, let us consider what is known about jihadi terrorists in general and suicide bombers in particular: their background, what makes them become terrorists and how suicide terrorists differ from their non-suicide counterparts. How is it possible for a mother of two young children and a 16-year-old schoolboy in Gaza in 2004 to become suicide bombers? What do we know about their psychological makeup?⁷³

As writers on terrorism and terrorists keep pointing out, ‘The questions of what constitutes terrorism and who is a terrorist are deeply problematic’ (Silke, 2008:100). One’s terrorist is another’s freedom-fighter. Schmid and Jongman (1988) identified more than 100 separate definitions of terrorism at the time.⁷⁴ For present purposes, the definition of terrorism used is that suggested by Crenshaw (1992:71),⁷⁵ namely: ‘a particular style of political violence, involving attacks on a small number of victims in order to influence a wider audience’. In considering existing empirical evidence about features of terrorists the reader should note that while some authors (for example, Silke, 2003a; Horgan, 2005) argue that we should draw on both pre- and post-9/11 studies in order to better understand the phenomenon of terrorism and terrorists themselves, others (for example, Kegley, 2002; Laqueur, 2000) disagree with this position on the grounds that since 9/11 humanity has been experiencing an age of ‘new terrorism’, exemplified by Al-Qaeda and its affiliates, that is significantly different from terrorism in the past by being ‘more lethal, more violent and more heavily motivated by fundamentalist religion’ (Silke, 2008:102). From this perspective, the ‘new terrorism’ is ‘retributive terrorism’, that is, not a means to an end an end in itself, whose aim is to wreak maximum destruction, making terrorism no different from a war of annihilation using such means of mass destruction as nuclear, biological, or chemical weapons. Silke (2008:102–103) argues convincingly that: (a) the new terrorism thesis is over-emphasised and ignores past examples of lethal, violent and fundamentalist terrorist organisations such as the suicide attacks on US forces by Muslim Moors in the Philippines at the beginning of the twentieth century; and (b), in contrast to the new terrorism thesis, the available evidence from studies of terrorists from different groups reveals more similarities than differences. In considering such evidence, however, it should be noted that, with the exception of one unpublished study by Hassan (2002),⁷⁶ who had direct access and was able to speak with suicide terrorists in the Middle East, the available research on jihadi radicalisation is almost all based on secondary analysis of data (Silke, 2008:101). To illustrate the quality of the research evidence available to draw conclusions from, in the study by Sageman (2004) mainly media reports and transcripts of court proceedings pertaining to 172

individuals who were or are members of extremist Islamist organisations were analysed in order to determine the profile of such people. Bakker (2006), like Sageman (2004), utilised court and media reports on 242 jihadis active in Europe who had been involved in terrorist attacks and attempts. In a recent study by Ansari et al. (2006), a Likert-type questionnaire was used to survey 80 practising Muslims in the UK together with in-depth interviews of 13 respondents. Finally, Sela-Shayovitz and Yellin (2007) examined the characteristics of suicide bombers with religious motives versus those with nationalist motives in a stratified random sample of 294 articles on suicide bombers, published in three major daily newspapers during the second intifada between 2002 and 2005.

The 9/11 attacks pushed international terrorism to the fore, accentuating the threat of terrorism, and more psychologists and other social scientists began to focus on the causes as well as the impact of terrorism (Wagner, 2006). Understandably, in the United States psychologists' initial concern was with treating the psychological aftermath of the devastating attack on the injured survivors, victims' families, people living close to the site of the attack, the fire and police personnel and emergency relief personnel who responded to the unprecedented assault on civilians. Discussion of the impact of terrorist acts of extreme indiscriminate violence, whether isolated events such as the Oklahoma City bombing in 1995 (see Sprang, 2003) or the psychological impact of protracted campaigns of political violence on societies such as Northern Ireland (see Muldoon, 2003) or with particular reference to the impact of terrorism on children (see Browne, 2003), is beyond the scope of the present chapter as is the psychology of cyber-terrorism (see Rogers, 2003). The aim of presenting empirical findings about terrorists reported next is to help the reader understand terrorist actions, away from mass media reports and government rhetoric that all too often labels terrorists as 'deranged' and 'evil', thus misdirecting attention from and obscuring 'those political and economic conditions that give rise to terrorism' (Ruby, 2002:15). As Zimbardo (2001:49) has emphasised, Americans (and others of, course) will not be able to 'stop future terrorism . . . unless we know what are the root causes of the hatred against America . . .' and how to change that hatred. This is not to deny either the indignation and grief people feel over terrorist attacks or the need for intelligence services to make it as difficult as possible for terrorists to strike at their targets and the significant role behavioural scientists can play in this context (see Busch and Weissman, 2005). So, what types of people become terrorists and why do they do so?

Without denying that psychologically abnormal persons become terrorists, the fact of the matter is that for someone to be an effective and efficient terrorist for a length of time they have to be able to think rationally, be disciplined, and have self-control and mental stamina (Taylor, 1988).⁷⁷ Not surprisingly, therefore, a close examination of the existing research on terrorists shows that: (a) terrorists are not psychologically abnormal (Horgan, 2005; Miller, 2006; Ruby, 2002; Silke, 2003a); (b) generally speaking, their often indiscriminate and extreme violence is a rational response to a situation of perceived intolerable injustice (Miller, 2006) and/or the need for revenge; and, (c) 'becoming a terrorist is for most people a

gradual process' (Silke, 2008:105). As far as the age and gender of terrorists are concerned, Bakker's (2006) study of 242 jihadi terrorists found that women comprised only 2 per cent. However, women have been involved in about 15 per cent of suicide attacks in Lebanon, 23 per cent in Israel (Sela-Shayovitz and Yellin 2007), 30–40 per cent in Sri Lanka and over 68 per cent in Turkey, a prominence that can be partly explained by the various operational advantages offered by women (Silke, 2003a:95). Regarding the age group most likely to be found among jihadis, while their age ranged from 16–59 in Bakker (2006), they were most likely to be in their teens to mid-twenties. In Sela-Shayovitz and Yellin's study the mean age of suicide bombers (who are a minority of active terrorists) was 20 for males and 22.6 for females (p. 164). The traditional view of terrorists as young, poor and of low education was shattered by the suicide bombers responsible for 9/11. More than 60 per cent in Sageman's (2004) survey had some higher or further-level education and three-quarters came from middle- or upper-class backgrounds. Similarly, Bakker (2006) reported a higher proportion (but still a minority of poorer individuals) in his study which also found that at the time of joining the majority of Islamists were in such professional occupations as doctors and teachers; less than one in four were in unskilled occupations or unemployed. Both Bakker (2006) and Sageman (2004) found the majority to be married.

The belief that jihadis have been brainwashed by teachers in madrassas (religious schools) from early on is undermined by the finding that the vast majority attend secular schools (Sageman, 2004). However, 99 per cent shifted to being very religious prior to joining a terrorist organisation, a change that comes about as they come to socialise more and more with other Islamists in the context of mosques, gradually becoming more radicalised as they come to adopt the views of the more extreme members of their group (that is, 'risky shift'), develop a strong group identity and loyalty that is conducive to joining the jihad, especially while isolated from older friends and family, and/or are marginalised in a foreign country where they have a strong sense of being discriminated against, of being the victims of injustice, as do so many like them worldwide (see Silke, 2008:109–13). The belief among jihadis that Muslims are socially disadvantaged due to discrimination is borne out by national statistics about the labour market in Britain (Silke, 2008: 113). The process of becoming a terrorist is significantly facilitated by exposure to injustice in the context of conflict in different parts of the world, a message that is drummed into them by sustained exposure to extremist propaganda in a mosque by a particular radical imam who is an exponent of the global *salafi jihad*⁷⁸ (or lesser jihad, a holy global violent war on behalf of Islam) and/or on the internet, leading to a stage where what they most want is revenge on those responsible for discrimination and injustice against Muslim populations. Silke (2008) mentions that another reason why some individuals become terrorists is increased status, excitement and self-esteem (p. 116). Finally, people who decide to join a terrorist organisation can do so through an identifiable route into it or by approaching a legitimate front office with links to such an organisation.

In view of the importance attributed by some to religion, an interesting question is whether there are significant differences between suicide bombers with religious motives in comparison to those with nationalist motives. Sela-Shayovitz and Yellin's (2007) study of 294 suicide bombers in Israel from 2002 to 2005 reported that with regard to age and marital status, no such differences were found, but religious motivation was higher among male than female bombers and that the majority (69.5 per cent) of the suicide bombers with nationalist motives had a higher level of education (that is, high school) while the majority (74.6 per cent) of those with religious motives had a lower level (elementary school). No significant differences were found among female suicide bombers. Finally, the great majority (approximately 85 per cent) of both male and female suicide bombers were unmarried and a higher percentage (37 per cent) of males with religious motives had been active in terrorist organisations than those who were motivated by nationalism (19 per cent). Sela-Shayovitz and Yellin (2007) concluded that, while the suicide bombers in the second intifada period examined were younger than those in earlier studies (a factor that may reflect changes in the processes of recruiting suicide bombers), 'it cannot be argued that there is one profile or one social or psychological prototype that characterizes the suicide bomber' (p. 166). In considering the findings reported and the conclusions that can be drawn from them about terrorists, two points cannot be emphasised enough: (a) studies of terrorists are methodologically limited by virtue of the fact that researchers do not have direct access to terrorists themselves and have to rely on secondary sources; and (b) listing the demographic and other characteristics of terrorists only enables us to offer a possibility-type answer to the question: who becomes a terrorists, and why? Such information helps us to understand how it is possible, but not inevitable, for some people with such features to become terrorists and to carry out such extreme acts of indiscriminate violence. As mentioned above, the roots of terrorism itself are to be found in the inequities in political, economic and social structures that all too often feed into and exacerbate terrorism.

'It cannot be argued that there is one profile or one social or psychological prototype that characterizes the suicide bomber'.

CONCLUSIONS

Psychologists have a great deal to contribute in the area of law enforcement, as exemplified by the cognitive interview, offender profiling methods and research into questioning suspects, false confessions and, finally, terrorism and terrorists. Psychologists, however, need to seriously address the limitations of tests used to select personnel and to acknowledge the limitations of offender profiling, whether psychological or statistical/actuarial. Incorporating findings from the psychological literature into police training can help improve police-citizen encounters, but only to a certain degree. The all-too-familiar dark blue police uniform appears to be a mixed blessing as far as police-citizen encounters are concerned. Traditional, and apparently not very effective, methods of questioning suspects need to give

way, as they have done in England and Wales, to interviewing methods that are informed by psychological knowledge and safeguard the rights of suspects and reduce the risk of false confessions without jeopardising the effectiveness of the work of investigators. Offender profiling has come a long way since the early 1970s, largely helped by the wide use of computers by law-enforcement agencies and researchers alike, and attests to psychology's contribution to criminal investigation. However, synthesising knowledge from psychological as well as statistical/actuarial profiling is needed in order to avoid further fragmentation of the field of profiling.

Despite methodological weaknesses, research into terrorism and terrorists has helped to demolish some popular myths, showing that there is not one profile or one social or psychological prototype that describes the suicide jihadi bomber. However, more emphasis should be placed on accessing and studying active terrorists if psychologists want to improve on the possible explanations they can offer to the question: who and why becomes a terrorist in general, and a suicide bomber in particular? Reflecting on the contributions to police work thus far and taking note of some of the limitations is necessary if psychology is to meaningfully contribute to move police work forward.

REVISION QUESTIONS

- 1 How useful are psychometric tests in selecting successful police officers?
- 2 What should police avoid in their contact with the public in order to enjoy a positive image?
- 3 What measures would you suggest your local police adopt in order to minimise prejudice and discrimination against particular minority groups?
- 4 Which major sources of stress are you able to identify for the police closest to you?
- 5 Compare and contrast the methods used by police in the United States and in the UK to interview criminal suspects. In which country is the risk of false confessions in the context of such police interviews greater and why?
- 6 Which model of false confession do you find more acceptable to you and why? How can false confessions be prevented?
- 7 What are some of the limitations of psychological profiling, statistical/actuarial profiling and geographic profiling and mapping?
- 8 How is it possible for a 16-year-old boy or a mother of two young children in the Middle East to become a suicide bomber?

ADDITIONAL READING

- Ainsworth, P.B. (2001b). *Offender Profiling and Crime Analysis*. Cullompton: Willan.
 Ainsworth, P.B. (2002). *Psychology and Policing*. Cullompton: Willan.
 Horgan, J. (2005). *The Psychology of Terrorism*. London: Routledge.

- Jackson, J.L. and Bekerian, D.A. (eds) (1997). *Offender Profiling: Theory, Research and Practice*. Chichester: Wiley.
- Kocsis, R.N. (2009). Criminal profiling. In R.N. Kocsis (ed.), *Applied Criminal Psychology: A Guide to Forensic Behavioral Sciences*. Springfield, IL.: Charles C. Thomas, pp. 213–33.
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- Moghaddam, F.M. and Marsela, A.J. (2004). *Understanding Terrorism: Psychological Roots, Consequences and Interventions*. Washington, DC: American Psychological Association.
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- Westervelt, S.D. and Humphrey, J.A. (eds) (2005). *Wrongly Convicted: Perspectives on Failed Justice*. Rutgers, NJ and London: Rutgers University Press.

11 CONCLUSIONS



The contents of this book show that a great deal has been happening at the interface of psychology and law. Especially since the 1980s, major advances have been made in our knowledge of a broad range of issues and the influence of psychology and law has been a two-way process. The maturity of legal psychology as a discipline in its own right and its contributions to society, both diverse and significant, are of special interest in view of a number of impediments in the process of bridging the gap between psychology and law.

As legal psychology continues to evolve, the indications are that psycholegal researchers are more cognisant than they used to be of the need to use a range of research methods and to conduct research that is ecologically valid. Of course, however forensically relevant research might be, 'there is always some risk when generalising from scientific studies to real world analogs' (Bruck and Ceci, 1995:309).

The discussion of empirical studies in the preceding chapters also shows that legal psychology's advances are more evident in some areas than in others and some summits still wait to be conquered. As Kadane (1993) has noted, there is undoubtedly an imbalance in the amount of attention psychologists have paid to different areas within law and legal processes. This imbalance probably reflects the fact that: (a) some issues are more amenable to study by the experimental method (psychologists' preferred method); and (b) the contemporary sociolegal climate in a country is such as to make some research topics the focus of psycholegal researchers' attention. In the process, important topics such as legal advocacy in and out of court, or how real-crime victims/witnesses fare in their interaction with lawyers in their chambers, in busy court corridors or in the courtroom and/or operational police on the street or in police stations, have been neglected by psychologists.

Despite limitations of some of the empirical literature discussed in the preceding chapters and the imbalance mentioned, euphoric about their successes, legal psychologists run the risk of overselling psychology to the lawyers and overlooking the few but major difficulties that remain in bridging what gap is left between the two disciplines. Such differences include their different models of anthropos and preferred methodology, difficulties within legal psychology and its relationship

with both academic and practising lawyers and a tendency for many psycholegal researchers not to locate their work in a contemporary critical sociolegal context.

As legal psychology approaches its adulthood and soldiers on in the early years of the twenty-first century, legal psychologists have a lot to be proud of. At the same time, there is reason to expect that the scope of psycholegal research will continue to be widened, psychologists' communication with academic and practising lawyers will become more frequent and more constructive, and the feeling of frustration that has characterised members of the legal and psychological professions will dissipate. Optimistic psychologists can, therefore, look forward to the day in the very near future when, to borrow Carson and Bull's (1995a:3) words, 'the legitimacy of the offspring of the relationship between psychology and law' will cease to be an issue.

Discussion in the preceding chapters has identified a number of gaps in our knowledge about various psycholegal issues. They include the following: tackling them poses a challenge for legal psychologists.

- Utilising a range of research methods (including follow-up studies of real-crime victims/witnesses as they are processed through the criminal justice process system) to determine the interaction effects of key factors known to impact adversely on the accuracy of adult and child witnesses. Through their work, psycholegal researchers must challenge conventional practices in order to achieve, as Westcott (2008) has rightly argued, substantive equality between the defendant and the victim.
- In view of the erosion of the jury in western English-speaking common law countries, there is a need to: (a) identify the merits and defects, as far as jury decision-making is concerned, of different alternatives in the jury reform debate such as lay persons vs professional judges alone, or laypersons vs a combination of lay persons and professional judges; and (b) evaluate the impact of and contribute to improving the guidance provided by judges in some jurisdictions to the jury on how to reach a reasoned verdict.
- Research into the experience of victims/witnesses before, during and after the trial involving an International Criminal tribunal is long overdue.
- The status of the expert witness in the court in the United States, England and Wales, Australia and other common law countries should be monitored systematically by focusing, for example, on the 'general acceptance' criterion which is considered a main admissibility criterion in the United States (as evidenced by post-*Kumho* decisions) but is not in England and Wales.
- Ascertain the comparative effectiveness of different methods of lie detection and provide a theory that accounts for success at both deceiving others and at identifying lying. In addition, both computerised lie-detection as well as human super lie-detectors, such as those being studied by Ekman and his co-workers in the United States, deserve more attention by psycholegal researchers.
- Ecologically valid studies are needed to investigate ways of improving the accuracy of facial composites and voice recognition.

- Contribute more to law enforcement by improving the predictive utility of different methods of selecting police personnel, generally as well as for specialist roles in operational policing. In addition, psychologists have a great deal to contribute to improving the operational utility of offender profiling methods as well as our understanding of terrorism and terrorists.
- Finally, historical and sociological research into the development of legal psychology as a discipline and how and why some of its 'successes' and 'failures' have come about will be of great interest and practical use to all those legal psychologists who like to reflect on their discipline and to take stock.

All those with an interest in legal psychology can look forward to the discipline's increasing growth in terms of both the quantity and quality of the research conducted and courses taught at tertiary and other institutions.

NOTES

1 PSYCHOLEGAL RESEARCH: AN INTRODUCTION

1. See Haney, 1980, cited by Blackburn, 1996.
2. See Shea's (1996) *Psychiatry in Court* regarding the use and usefulness of psychiatric reports and psychiatric evidence in court proceedings.
3. Bartol and Bartol, 2004a:2.
4. See Howells and Blackburn, 1995.
5. See Tyler, 1990.
6. See Gudjonsson, 1996. See also Nicholson and Norwood, 2000 regarding the quality of forensic psychological assessments, reports and testimony.
7. Cited by Lösel, 1992.
8. Magner, 1991:121. However, see Landy, 1992.
9. Bartol and Bartol, 2004b:9.
10. van Koppen, 1995; van Koppen and Lochun, 1997.
11. Granhag and Strömwall, 2004a.
12. Sporer, 2004.
13. Sigerdson and Gudjonsson, 2004.
14. See Lösel et al., 1992a:509–53; Davies et al., 1996:579–601.
15. See Tatsuya, 2007.
16. Davies, 1995:187.
17. See Toch, 1961, *Legal and Criminal Psychology*; Marshall, 1969, *Law and Psychology in Conflict*; Gordon, 1975, *Forensic Psychology: A Guide for Lawyers and Mental Health Professionals*. Cited in Diamond, 1992.
18. Sales, 1977; Tapp and Levine, 1977; Saks and Hastie, 1978; Loftus, 1979; Kerr and Bray, 1982; Konečni and Ebbesen, 1982a; Wells and Loftus, 1984; Monahan and Walker, 1985; Hans and Vidmar, 1986; Weiner and Hess, 1987; Wrightsman, 1987; Raskin, 1989a; Kagehiro and Laufer, 1992; Ogloff, 1992; Goodman and Bottoms, 1993; Ross et al., 1994a; Cutler and Penrod, 1995a; Bottoms, Kovera and McAuliff, 2002; Bartol and Bartol, 1994, 2004a, 2004b; Levine, 1995; Roesch et al., 1999; Wrightsman, 1999.
19. Clifford and Bull, 1978; Farrington et al., 1979a; Haward, 1981b; Lloyd-Bostock, 1981a, 1981b, 1984, 1988; Lloyd-Bostock and Clifford, 1983; Müller et al., 1984; Fitzmaurice and Pease, 1986; King, 1986; Pennington and Lloyd-Bostock, 1987; Gale, 1988; Hollin, 1989; Gudjonsson, 1992; Bull and Carson, 1995; Milne and Bull, 1999; Roesch et al., 2001; Vrij, 2000; Traverso and Bagnoli, 2001; Westcott et al., 2002; Howitt, 2002; Adler, 2004; Memon, Vrij and Bull, 2003.

20. Lösel et al., 1992a; Wegener et al., 1989.
21. Stephenson, 1995:133.
22. See Lösel, 1992.
23. Monahan and Loftus, 1982.
24. Bartol and Bartol, 2004b:10.
25. Lloyd-Bostock, 1994:133.
26. Melton et al., 1987; Ogloff, 2000.
27. Bartol and Bartol, 2004b:10.
28. Freeman and Roesch, 1992.
29. Diamond, 1992; Ogloff, 2000.
30. Holmes, 1897.
31. Schlegel, 1970.
32. Wigmore, 1909; Magner, 1991.
33. Cited by Ogloff, 2000: 461.
34. Ogloff, 2000:462.
35. Clifford and Bull, 1978:5.
36. Diamond, 1992:vi.
37. McConkey, 1992:3.
38. McEwan, 2003:4.
39. For example, Saks and Hastie, 1978; Farrington et al., 1979b; Yarmey, 1979; Lloyd-Bostock, 1981a, 1981b, 1988; Diamond, 1992; Lösel, 1992.
40. Haward, 1981:15.
41. Carson, 1995a:43.
42. Carson and Bull, 1995a:7.
43. Ogloff, 2001:13–14. See also Ogloff, 1992.
44. Lloyd-Bostock, 1988:1.
45. See Marshall, 1969.
46. Carson and Bull, 1995b; Diamond, 1992:viii; McEwan, 2003.
47. See Garrido and Redodo, 1992; Traverso and Manna, 1992; Traverso and Verde, 2001.
48. Lloyd-Bostock, 1988.
49. Legge, 1975:5.
50. Chisholm and Nettheim, 1992:1.
51. McEwan, 2003:1.
52. Taken from Ogloff and Finkelman, 1999:13–15.
53. King, 1986:76.
54. Doyle, 1989:125–6.
55. See McConkey, 1992:3.
56. Carson and Bull, 1995a:29.
57. 1979b:xiv.
58. King, 1986:76.
59. See Clifford, 1995:19–24; Davies, 1992.
60. Farrington et al., 1979b:xiii.

61. Clifford and Bull, 1978:5.
62. See Bray and Kerr, 1982; King, 1986; Konečni and Ebbesen, 1992; Bornstein, 1999; McEwan, 2003:4.
63. See in chapter 2, Tollestrup, Turtle and Yuille's (1994) finding concerning the relationship between arousal and accuracy with real-life victims and witnesses to robbery and fraud.
64. See Haward, 1981a.
65. Toch, 1961:19, cited by Lloyd-Bostock, 1981a:xii.
66. Farrington et al., 1979b.
67. Haward, 1981:16.
68. See Hessing et al., 1988.
69. Wiener and Small, 1992.
70. Lloyd-Bostock, 1988.
71. Lloyd-Bostock, 1981b:21.
72. Farrington et al., 1979b:xiii.
73. For example, Brewer and Wilson, 1995; Bull and Carson, 1995; Lösel et al., 1992a; Kagehiro and Laufer, 1992; Ross et al., 1994a; Davies et al., 1996; Roesch et al., 1999; Roesch et al., 2001; Traverso and Bagnoli, 2001; Adler, 2004; Bartol and Bartol, 2004a; Brewer and Williams, 2005.
74. See Proctor and Capaldi, 2001; Tolman and Brydon-Miller, 1997.
75. Brewer and Wilson, 2005.
76. For example, Thomson, 1981, 1984, 1991; McConkey and Roche, 1989; McConkey and Sheehan, 1988; Naylor, 1989; Tucker et al., 1990; Vernon, 1991.
77. Evans and Stanley, 1994.
78. Cattermole, 1984; Freckelton, 1987, 1996; Freckelton and Selby, 2005; Moloney, 1986; Wardlaw, 1984.
79. McMahon and Knowles, 1995.
80. Freckelton, 1996; Magner, 1995a, 1995b; Thomson, 1995b.
81. Brewer and Wilson, 1995.
82. McMahon, 2003.
83. See Greig and Freckelton, 1988, 1989, 1990; Freckelton, Greig and McMahon, 1991; Freckelton, Knowles and Mulvaney, 1992.
84. See Law Reform Commission of New South Wales (1985) *The Jury in a Criminal Trial*; Law Reform Commission of Victoria (1985) *The Jury in a Criminal Trial*; Law Reform Committee [Vic.] (1995) *Jury Service in Victoria*; Law Reform Commission of Western Australia (1991) *Report on Evidence of Children and Vulnerable Witnesses*; Australian Law Reform Commission and Human Rights and Equal Opportunity Commission (1997), *Seen and Heard: Priority for Children in the Legal Process*; New South Wales Children's Evidence Taskforce (1997) *Audio and Videotaping of Children's Out-of-Court Statements*; Australian Law Reform Commission (2007), Reform Issue 90, *Juries*; Australian Law Reform Commission (1997), Draft Recommendation Paper No. 3, *A Matter of Priority: Children and the Legal Process*.

85. See, for example, *Brown v. Board of Education*, 347 US 483, 494–5, n.11 (1954) (psychological effects of segregated education); *Ballew v. Georgia*, 435 US 223, 231–44 (1978) (effects of jury size); Bruck and Ceci (1995) (children’s suggestibility).
86. See Irving and Hilgendorf, 1980; Royal Commissions on: Civil Liability and Compensation for Personal Injury, 1978; Gambling, 1978; Criminal Procedure, 1980; Fraud Trials, 1986 (Medical Research Council (MRC) Applied Psychology Unit, Cambridge, 1986) and the Royal Commission on Criminal Justice, 1993 – *Runciman Report*.
87. See Mellers and Baron, 1993.
88. See McMahon and Knowles, 1995.
89. See Davies et al., 1996; Hollin, 1995, 1996; Howells and Blackburn, 1995; McGuire et al., 2000.
90. See Heilbrun, 1992.

2 EYEWITNESSES: KEY ISSUES AND EVENT CHARACTERISTICS

1. Narby and Cutler, 1994:724.
2. Cutler et al., 1990; Visher, 1987.
3. Berman et al., 1995.
4. For numerous examples of wrongful convictions due to eyewitness testimony proven by DNA testing, see the Innocence Project <www.innocenceproject.org>.
5. See Brouwer (1981) for a comparative analysis of adversary and inquisitorial procedures.
6. McEwan, 1995a; Waight and Williams, 1995:2–17.
7. See Freckelton and Selby (2005:689–729) for the discussion of the controversy over court-appointed experts, assessors and referees in Australia, the UK, Canada, New Zealand and the United States.
8. Burt, 1931; Gross, 1911; Hutchins and Slesinger, 1928; McCarty, 1929; Münsterburg, 1908; Stern, 1939; Whipple, 1909.
9. Deffenbacher and Loftus, 1982; Sanders, 1986.
10. Yarmey and Tressillian Jones, 1982.
11. Bennett and Gibling, 1989; Noon and Hollin, 1987.
12. See National Institute of Justice, 1999, research report, *Eyewitness Evidence: A Guide for Law Enforcement by Technical Working Group for Eyewitness Evidence*.
13. See Epstein, 1994.
14. See Cohler, 1994; Loftus, 1993.
15. Bartlett, 1932; Pitchert and Anderson, 1977.
16. Johnson, 1983.
17. Morton et al., 1985.

18. Cited by Gudjonsson, 1992:98.
19. Buckhout, 1974; Dent, 1977.
20. Buckhout, 1974.
21. See chapter 10 for witness accuracy in police identification procedures.
22. See Kassin et al. 1989, for a survey of such experts.
23. Loftus and Ketcham, 1991, see also chapter 7.
24. Hedderman, 1987.
25. For example, Davies, 1986.
26. For example, Gudjonsson, Bull, Clifford and Davies.
27. For example, Cutler and Penrod, 1995a; Wells, 1993.
28. McCloskey and Egeth, 1983.
29. See Tollestrup et al. 1994.
30. Yuille et al., 1994.
31. Konečni and Ebbesen, 1992:416.
32. Davies, 1992:265.
33. Cited by Lloyd-Bostock, 1988.
34. Aronson, 1980.
35. Yuille and Cutshall, 1986.
36. Clifford and Scott, 1978.
37. See Lipsey, M.W. and Wilson, D.B. (2002). *Practical Meta-Analysis*. Sage.
38. See <<http://wilderdom.com/research/meta-analysis.html>>.
39. Davies, 1992; Konečni and Ebbesen, 1992; King, 1986; Malpass and Devine, 1981; Yuille, 1992.
40. Adler, 2004; Bartol and Bartol, 2004a; Memon, Vrij and Bull, 2003; Wells et al., 1999.
41. Stated in *Virgo* (1978) 67 Cr.App.R 23, cited by McEwan, 2003:212.
42. Cited in Thomson, 1995a:120–1.
43. Personal communication with Nathanael Papageorgiou, ex-Deputy Chief (Operations) of the Cyprus Police Force who, as a Detective Superintendent, headed the investigation into Jacqueline's disappearance and also questioned the suspect.
44. Cited in Thomson, 1995a:122.

3 EYEWITNESSES: THE PERPETRATOR AND INTERVIEWING

1. Cited by Hosch, 1994:343.
2. Cited by Diges et al. 1992:317.
3. See Hosch and Cooper, 1982; Hosch and Platz, 1984; Hosch et al., 1984.
4. Cited by Hosch, 1994:332.
5. See Hosch, 1994:341–3, for reviews.
6. Cited by Hosch, 1994:338.
7. Messick and Damarin, 1964.

8. Hosch et al., 1990, 1991.
9. Cited by Hosch, 1994.
10. Geiselman et al., 1986; Gudjonsson, 1992a; Lloyd-Bostock, 1988.
11. See Haaga, 1989; Schare et al., 1984.
12. Davies, 1986; McGeoch, 1932, cited by Gudjonsson, 1992a.
13. Cited by Ellis and Ashbrook, 1991.
14. Feldman, 1993:276–7; Kapardis, 1989; Kapardis and Cole, 1988; National Committee on Violence, 1990.
15. See *Davis v. R*, Supreme Court, South Australia, Crt Crim App, 8 September 1995.
16. Kapardis, 1993; Kennedy and Silverman, 1990; Parker and Ray, 1990.
17. These research findings have been reported by Williams et al., 1992:146.
18. Botwinick and Shock, 1972.
19. Bartlett and Leslie, 1986; Smith and Winograd, 1978.
20. Tickner and Poulton, 1975.
21. Yarmey and Kent, 1980.
22. National Committee on Violence, 1990:36–8; Walker and McDonald, 1995.
23. See Bothwell et al. 1989; Brigham, 1986; Brigham et al., 1982; Jalbert and Getting, 1992; Lindsay and Wells, 1983; Shapiro and Penrod, 1986; Wells, 1978.
24. Cited by Levine and Tapp, 1971.
25. Cunningham and Bringmann, 1986; Lindsay, 1986.
26. Howels, 1983; Lipton, 1977; Shapiro and Penrod, 1986; Yarmey and Kent, 1980.
27. Contradicted by Cross et al., 1971.
28. Jalbert and Getting, 1992; Shapiro and Penrod, 1986.
29. Bull, 1979; Bull and Green, 1980; Shoemaker et al., 1973.
30. Regan and Berscheid, 1995; Walster et al., 1966.
31. Jackson and Ervin, 1992.
32. Efran, 1974; Landy and Aronson, 1969; Sigall and Ostrove, 1975.
33. Cross et al., 1971.
34. Kleck and Rubinstein, 1975.
35. Cited by Leippe, 1994:384–5.
36. Cases cited by Smith et al. (1989).
37. Bothwell et al., 1987b; Leippe, 1980, 1994; Luus and Wells, 1994a, 1994b; Wells and Murray, 1984.
38. See Greuel, 1992; Stone, 1991; Vrij and Winkel, 1992; Winkel and Koppelaar, 1992.
39. *Ramsden* [1991] *Criminal Law Review* 295; *Williams (John)*, *Times*, October 1994. Both cases are cited by McEwan, 2003:208.
40. Reported in the *Sunday Times* (Spectrum), 19 May 1974.
41. Verinis and Walker, 1970; Tickner and Poulton, 1975; Logie et al., 1992.
42. Hinsz, 1990; Stephenson et al., 1986a, 1986b.
43. Cited by MacLeod et al., 1994:129.
44. Ellis, 1984; Shepherd and Ellis, 1996.

45. Such as Milne and Bull's 1999, *Investigative Interviewing: Psychology and Practice*, Memon and Bull's 1999, *Handbook of the Psychology of Interviewing* and Memon, Vrij and Bull's (2003) *Psychology and Law* (2nd edition).
46. For example, Binet, 1900; Gardner, 1933; Stern, 1939; Whipple, 1909.
47. For example, Dunning and Stern, 1992; Jobe et al., 1993; Scrivner and Safer, 1988.
48. Stated in Payne, 1987.
49. See Fisher and Geiselman, 1992.
50. See Hunt and Einstein, 1981.
51. Cited by Hoffman et al., 1992:293.
52. For example, Belli, 1989; Metcalfe, 1990.
53. Sheehan, 1989.
54. Köhnken and Brockman, 1987.
55. See Holst and Pezdek, 1992; Lindsay, 1994b; Loftus et al., 1978; Loftus et al., 1989; Weingardt et al., 1994.
56. Cited by Yarmey 1990.
57. See McCloskey and Zaragoza, 1985; Zaragoza and Koshmider, 1989; Zaragoza et al., 1987.
58. Merckelbach, Van Roermund and Candel, 2007.
59. See also Paterson and Kemp, 2005, 2006.
60. Memon et al. 2003:129, attribute this definition to Brewin, Dalgleish and Joseph, 1996.
61. Memon et al., 2003:127 cite in this context Heaps and Nash, 1999 and Lampinen, Neutchatz and Payne, 1998.
62. See Ost, 2006:271–81 and Shobe and Schooler, 2001 for a discussion of memory recovery techniques.
63. See Davies and Dalgleish, 2001; Freckelton and Selby, 2005:409–31; Pezdek and Banks, 1996 for detailed treatment.
64. See Ceci and Loftus, 1994; Loftus, 1993; Lindsay and Read, 1994; Read and Lindsay 1994; Slovenko, 1993.
65. Cited by Memon, Vrij and Bull, 2003:127.
66. For example, *The Courage to Heal* by Bass and Davis, 1988.
67. See Bulkley and Horowitz, 1994; Wakefield and Underwager, 1992.
68. See Freckelton and Selby, 2005: 409–11, for a discussion of the two syndromes.
69. For example, Baldwin, 1992, 1993; Moston and Engelberg, 1993, and Williamson, 1993.
70. It can be downloaded at: <www.scotland.gov.uk/Publications/2003/18265/27045>.
71. Bower, 1967; Tulving, 1974.
72. See Clifford and Gwyer, 1999.
73. Croft, 1995.
74. See Gudjonsson, 1992a.
75. See McConkey and Sheehan, 1988; Judd et al., 1994; Freckelton and Selby, 2005:160–7.

4 CHILDREN AS WITNESSES

1. See Davies, 2004:149 for details.
2. See Nottinghamshire County Council, 1990.
3. See *Bulletin*, January 2004, Office of Juvenile Justice and Delinquency Prevention, US, <<http://www.ncjrs.gov/html/ojjdp/199298/intro.html>> for evidence indicating that in the US the annual number of sexual abuse cases substantiated by child protective services dropped 40 per cent between 1992 and 2000.
4. Green, 1986.
5. Byrne and Moloney, 1991; Wakefield and Underwager, 1991.
6. Davies, 2004:151.
7. See Howels, 1994 regarding prevention of child sexual abuse.
8. See, for example, in England and Wales: *Police and Criminal Evidence Act, 1984*, s.66; Schedule 9 (para.33) *Criminal Justice and Public Order Act, 1994*; *Youth Justice and Criminal Evidence Act, 1999* came into effect in 2002.
9. See Myklebust and Alison, 2000, regarding police interviews with children in Norway.
10. See Smith, 1995; Spencer and Flin, 1993.
11. Myers, 1993.
12. See Byrne, 1991.
13. See Saywitz, 2002 regarding developmental underpinnings of children's testimony.
14. Stated in *Hampshire* [1995] 2 All E.R. 1019, Auld J at 1026, cited by McEwan, 2003:211.
15. See Birch, 1992; Brennan, 1993; Bull 1992, 1995a, 1995b; Bull and Carson 1995, Carson 1995c; Clifford, 1993; Davies, 1991, 1993b, 1994; Davies and Noon, 1991, 1993; Dent and Flin, 1992; Flin, 1993; Lloyd-Bostock 1984; McEwan, 1988, 1990; Milne and Bull, 1995, 1999; Plotnikoff and Woolfson, 2002; Sattar and Bull, 1994; Morgan and Zedner, 1992a, 1992b; Spencer and Flin, 1990, 1993; Westcott, 1995; Westcott et al., 2002; Wilson, 1995; Hoyano, 2007.
16. See Bottoms and Goodman, 1996; Ceci and Bruck, 1995; Doris, 1991; Goodman and Bottoms, 1993; Moore et al., 1994; Perry and Wrightsman, 1991; Roberts and Blades, 2000; Schwalb, 1991; Zaragoza et al., 1995.
17. See Brooks and Siegal, 1991; Byrne, 1988; Byrne and Maloney, 1991; Cashmore, 1991; Dent, 1988; Law Reform Commission of Western Australia, 1991; Naylor, 1989; New South Wales Children's Evidence Task Force, 1997; Parkinson, 1991; Siegal and Peterson, 1995; Thomson, 1988; Tucker et al., 1990; Vernon, 1991; Warner, 1988.
18. See Davies and Seymour 1997, regarding child witnesses in New Zealand's criminal courts.
19. See Köhnken, 2002.
20. Now replaced by the *Youth Justice and Criminal Evidence Act 1999*, s.27.
21. See Cooke and Davies, 2001 and Hoyano, 2007 for critiques of YJCEA 1999.

22. *Smellie* (1919) 14 Cr.App.R 128 CA; X,Y, Z (1990) 91 Cr.App.R. 36, CA; YJCEA 1999 s.23.
23. YJCEA 1999 s.30.
24. YJCEA 1999 s.25.
25. YJCEA 1999 s.26.
26. *R (D) v. Camberwell Green Youth Court* [2005] UKHL 4; [2005] 1 WLR 393 at [54]-[63] per Baroness Hale, cited by Hoyano, 2007, p. 860, footnote 74.
27. YJCEA 1999 ss.21 (1) (b), 35 (3) (a), 21 (1) (b) (ii), 35 (3) (b) (c).
28. See Hoyano, 2007, for a critical review.
29. See footnote 20 in Hoyano, 2007:851, for ample empirical evidence in support of her conclusion.
30. Cited by Hoyano, 2007:860.
31. See *Police and Justice Act, 2006*, s.47, inserting s.33A into the YJCEA 1999.
32. See Davies, 1991; Davies and Noon, 1993, for a discussion of these reforms.
33. See s.37C *Evidence Act 1958* (Vic.), as amended by the *Crimes (Sexual Offences) Act, 1991*; *Evidence (Closed Television) Act, 1989* (ACT); ss 405D and 405D *Crimes (Child Victim Evidence) Amendment Act 1990* (NSW) ss.405D and 405E, and *Acts Amendment (Evidence of Children and Others) Act, 1992* (WA).
34. See Fyfe, 2001 regarding the whole issue of protecting intimidated witnesses generally.
35. Cited by Cashmore, 2002.
36. Cashmore and Dhaas, 1992.
37. O'Grady, 1996.
38. Murray, 1995.
39. For example, Goodman et al., 1998.
40. Murray, 1995.
41. The 1992 *Memorandum of Good Practice* was replaced in 2002 by *Achieving Best Evidence in Criminal Proceedings: Guidance for Vulnerable and Intimidated Witnesses, Including Children* (Home Office, 2002), the second edition of which was published jointly in 2007 by the Home Office and the Department of Health.
42. See also Vrij, 2002 for a literature review of deception in children and implications for children's testimony.
43. See Baker-Ward and Ornstein, 2002; Fivush and Shukat, 1995; Wilson, 1995.
44. Fivush et al., 1987; Hammond and Fivush, 1991; Hudson and Fivush, 1987, cited by Fivush, 1993; Pillemer and White, 1989; Sheingold and Tenney, 1982; Todd and Perlmutter, 1980.
45. See Fivush and Hammond, 1990; Fivush et al., 1991; Hudson, 1990; Hudson and Fivush, 1991.
46. See Davies, 2004, for detailed discussion of deception in children's accounts.
47. See Schacter et al., 1995 for evidence that some aspects of memory development and cognitive development are associated with immature frontal functioning.
48. See Thomas [1994] *Criminal Law Review*, 745, for two witnesses to a murder aged 8 and 11.

49. See also Fitzpatrick and Boldizar, 1993; Shakoor and Chalmers, 1991.
50. Cited by Batterman-Faune and Goodman, 1993.
51. See Rosenthal, 1995 for an account.
52. Ceci et al., 1996, 1994; Huffman et al., 1997; Garry et al., 1996; Hyman et al., 1995; Loftus and Pickerel, 1995; Mazzoni et al., 1999; and Pezdek and Hodge, 1999.
53. They adapted it from Coppersmith and Gilbert's (1982) scale. Candel et al. (2000) have reported that children's self-esteem can be reliably assessed using the Bonn test of Statement Suggestibility. See also Gudjonsson's Suggestibility Scale in chapter 10.
54. Cited by Memon, Vrij and Bull, 2003.
55. See Myers, 1993 and Lyon, 1995 for criticisms of Bruck and Ceci's work but see also Ceci et al.'s 1995 response to those criticisms of their work and the *amicus* brief.
56. Ceci and Leichtman, 1992, cited by Batterman-Faune and Goodman, 1993.
57. Siegal and Peterson, 1995. See also Goodman et al., 1991; Rudy and Goodman, 1991.
58. Davis and Bottoms, 2002.
59. Cassell and Bjorklund, 1995.
60. Cited by Saywitz and Snyder, 1993.
61. See also Dickinson, Poole and Laimon, 2005, for a more recent review of the literature.
62. See Raskin and Yuille's (1989) 'Stepwise Interview'; Fisher and Geiselman's (1992) 'Cognitive Interview'; and Home Office (2002, 2007) *Achieving Best Evidence in Criminal Proceedings*.
63. From Nelson et al., 1983.
64. Geiselman and Padilla, 1988; Geiselman et al., 1990; Saywitz et al., 1993.
65. See La Rooy, Pipe and Murray, 2006 regarding the usefulness of this mnemonic of the CI immediately after an event or six months later.
66. Cited by Memon et al., 1993.
67. Cited by Boat and Everson, 1993.
68. For example, Bruck and Ceci, 1995; Koocher et al., 1995; Raskin and Yuille, 1989.
69. For example, Goodman and Aman, 1990; Saywitz et al., 1991a.
70. See also Lamb, 1994.
71. Cited by Memon, Vrij and Bull, 2003.
72. Ascherman et al., 1998; Hudson and Fivush, 1991; Paterson and Bull, 1999.

5 THE JURY

1. Interestingly, King John strongly opposed the *Magna Carta* in 1215 but signed it into law fearing he would lose the throne if he did not (Clarke, 2000:40).

2. See Vidmar, 2000b for an excellent historical and comparative perspective on the common law jury and Kaplan and Martin, 2006a for detailed discussion of the jury system in western English-speaking common law countries and on continental Europe.
3. Cited by Kerr, 1987:64.
4. See New South Wales Law Reform Commission [NSWLRC] (1985:13–17) for a more detailed historical account.
5. Morris Committee, 1965, Cmnd 2627.
6. Cited by Antonio and Hans, 2001:70.
7. It was the Jury Selection and Service Act of 1968 that mandated voters' lists as the primary source for federal jury polls in the United States (Antonio and Hans, 2001:70).
8. According to Lloyd-Bostock, 1996, in addition to its consisting of 15 instead of the normal size of 12 members, other peculiarities of Scots juries include a requirement for a majority decision of at least 8 out of 15 for either acquittal or conviction (not proven and not guilty are combined), thus making it impossible to have a hung jury for there will a majority decision one way or another (p. 351). See Hope and Memon (2006:35–7) for a detailed discussion of 'Not Proven Verdict' that made up 21 per cent of Scottish acquittals in 2002 (*Criminal Proceedings of Scottish Courts, 2002*).
9. See Kaplan, Martin and Hertel, (2006) for an overview of European mixed (lay and professional) juries.
10. See Kadane, 1993:232–3, who criticises voter registration lists, and Fukurai et al. 1991 who suggest using cluster sampling to select representative jurors. Jury representativeness has been improved as a result of: (a) computerisation making it possible to update jury pool lists and to combine voters' lists with licensed drivers' lists; and (b) by the introduction of the one-day trial system in some jurisdictions that increases the willingness of people to come forward for jury service when summoned (Antonio and Hans, 2001:71).
11. For example, unlike many other jurisdictions, in Washington in the District of Columbia, there is no automatic disqualification from jury service on professional grounds and, consequently, lawyers and judges are called for jury service and sit on juries (May, 1998:270).
12. Some authors (for example, King, 2000) have argued that peremptory challenges should be abolished altogether (as in England), as Justice Thurgood Marshall maintained in his concurring opinion in *Batson v. Kentucky*, 476 US 79 (1986).
13. The right of the accused to challenge a juror before he/she took the oath dates back to the fifteenth century. In England and Wales in 1925 the number of such challenges permitted was reduced from 25 to 12, in 1949 to 7 (per defendant if two or more were tried together), in 1977 it was further reduced to 3 and, finally, in 1989 the right was removed altogether (Lloyd-Bostock, 1996:353). The abolition of the peremptory challenge means that it is not possible to ensure a

- racially-mixed jury. A defendant can still challenge jurors for cause but the scope is very limited because only a juror's name and address are known.
14. See Vidmar, 2000a and Kaplan, Martin and Hertel, 2006 for detailed accounts of the jury systems of various countries.
 15. Cited by Memon, Vrij and Bull, 2003.
 16. See s.42(1) *Criminal Justice and Public Order Act 1994* for England and Wales.
 17. Under the *Contempt of Court Act 1981* which the Runciman Royal Commission (1993) recommended it be amended to allow authorised research in the jury room, but Lord Justice Auld's (2001) review of the criminal justice system did not.
 18. See also Hill and Winkler, 2000 on this.
 19. Darbyshire, 1991:743 attributes her comments on these Latin terms to Cornish, 1968:12.
 20. However, see *Lewis v. United States*, 116, S.Ct 2163 (1996) for a Supreme Court ruling by a 5 to 4 majority that defendants who are prosecuted in a single case for more than one petty offence do not have the constitutional right to jury trial.
 21. Cited by Cammack, 1995:481.
 22. *Times*, 23 March 2005, Law Report, p. 74.
 23. Lloyd-Bostock, 1996:350.
 24. Darbyshire, 1991:751.
 25. The occasional vetting of jurors by the Director of Public Prosecutions in England and Wales in trials where strong political motives are involved, for example, adds further to the unrepresentativeness of the jury due to persons who are disqualified, excused from jury service or are rejected when the jury is empanelled in court.
 26. King, 2000:117.
 27. Brown and Neal, 1988:127–8; Darbyshire, 1991:741, 746; Evans, 1995. In the mid-1990s in England and Wales juries were used in approximately 12–14 civil trials a year (Lloyd-Bostock, 1996); in other words, the civil jury 'to all practical purposes [has] been abolished' (Lloyd-Bostock, 1995:351). Also, only 1–2 per cent of all trials in England are heard by a jury (Hope and Memon, 2006:31). Civil juries are used in the State of Victoria but are restricted to defamation cases in the five other jurisdictions in Australia (Goodman-Delahunty and Tait, 2006:51). Reforms in New Zealand have drastically reduced the use of civil juries (Horan, 2004).
 28. Blom-Cooper, 1974.
 29. Blom-Cooper, 1974.
 30. Willis, 1983.
 31. Willis, 1983.
 32. Blom-Cooper, 1974.
 33. Bevan et al., 1958:447; Kerr, 1987:63.
 34. Queensland Criminal Justice Commission, 1991.
 35. Barber and Gordon, 1976; Memon, Vrij and Bull, 2003; Nathanson, 1995; Pickel, 1995; Studebaker and Penrod, 2005.
 36. Ogloff and Vidmar, 1994; Sue et al., 1974.

37. Green, 1990.
38. Kramer et al., 1990a.
39. Bevan et al., 1958.
40. Darbyshire, 1991:746; Dunstan et al., 1995:42.
41. See the case of *Kemp*, *Times*, 25 April 1994.
42. Cadzow, 1995:16; Margolick, 1995; Slind-Flor, 1992; Feldman and Bell, 1991; Shuman et al., 1994; but see Ryan, 2003 for evidence that the experience of serving on a jury in New South Wales, Australia, is a positive one. However, the opposite seems to apply to civil juries (Horan, 2004).
43. Kerr, 1987:63; Nathanson, 1995; Severance et al., 1992; Thompson, 2002; Williams, 1963.
44. Kerr, 1987:63.
45. Mark, 1973 but see Zander, 1974 for a rebuttal.
46. Stephenson, 1992.
47. Baldwin and McConville, 1979, 1980a; Kalven and Zeisel, 1966; McCabe and Purvis, 1974; Stephenson, 1992; Zander and Henderson, 1994.
48. Darbyshire, 1991:744; Dunstan et al., 1995:33.
49. Darbyshire, 1991:748.
50. Blom-Cooper, 1974.
51. Darbyshire, 1991:741.
52. Blom-Cooper, 1974. An exception to this would be some jurisdictions in the United States where long terms of incarceration can be imposed on even minor repeat offenders to keep them out of circulation under the ‘three-strikes-and-you-are-out’ approach.
53. Blom-Cooper, 1974. See Levett et al., 2005:394–5, for discussion of this point.
54. Kerr, 1987:63; Roskill Committee, 1986.
55. Duff and Findlay, 1988; Russell, 2004.
56. Heuer and Penrod, 1995:527.
57. Heuer and Penrod, 1995:527.
58. Devlin, 1974.
59. Diamond and Casper, 1992.
60. Nietzel et al., 1999:39.
61. McCabe, 1975; Sealy, 1975.
62. Zander and Henderson, 1994. Most (75 per cent) of 2000 exiting jurors interviewed in New South Wales served on trials lasting less than two weeks (Ryan, 2003).
63. Diamond and Casper, 1992; Harding, 1988; Thompson, 1989, 2002. See Julian, 2007 for judicial support of this view. The mode of presentation of instructions to the jury is crucial in this context (Brewer, Harvey and Semmler, 2004).
64. Bornstein, 1994; Hans and Lofquist, 1992.
65. Galiber et al., 1993. See Clarke, 2000 for an account of the origins and historical evolution of jury nullification (that is, the jury’s power not to adhere to the law).
66. Heuer and Penrod, 1995:527.

67. In the English study conducted by Baldwin and McConville (1979) the jury sometimes ignored the judge's direction to acquit the defendant, especially where the defendant was black. Such verdicts were deemed to be perverse acquittals.
68. Zander and Henderson, 1994:47.
69. Zander and Henderson, 1994:46.
70. Jackson, 1996:331; Cutler and Hughes, 2001; Boatright, 2001.
71. See Lloyd-Bostock, 1996:350 for an account of the growth of Magistrates' Courts at the expense of jury trials.
72. See Werner et al., 1985 for one of the reports from that project.
73. See also Hans and Vidmar, 1991.
74. However, as far as it has been possible to ascertain, it would be illegal to tape jury deliberations in any western common law or civil law country.
75. Cited by Goodman-Delahunty and Tait, 2006.
76. Cited by Goodman-Delahunty and Tait, 2006.
77. Devine et al. 2001 give a compound figure of 7 per cent for both retrospective surveys and interviewing ex-jurors (p. 627).
78. Hastie, Penrod and Pennington, 1983; King, 1986; Lloyd-Bostock, 1996; McEwan, 2000.
79. See Strodtbeck et al., 1957, and Chicago Law School's Jury Project – Simon, 1967 – for early examples.
80. See Cornish, 1968; Sealy and Cornish, 1973.
81. See issues of *Indiana Law Review*, 1995, vol. 70 (3,4).
82. Cited by Goodman-Delahunty and Tait, 2006:52.
83. Robert Maxwell was alleged to have 'plundered' his companies' pension fund.
84. See Cotterill, 2003 for a linguistic analysis of the O.J. Simpson trial.
85. Cited by Brigham, 2006.
86. Arce et al., 1996; Bagby et al., 1994; Brekke and Borgida, 1988; Hans and Vidmar, 1982; McEwan, 2000:112; Mills and Bohannon, 1980.
87. Crowley et al., 1994; Gabora et al., 1993.
88. Weir and Wrightsman, 1990.
89. See Arce, 1989, cited by Arce, 1995:566–7.
90. Cited by Hoffmann, 1995:1137.
91. See <http://en.wikipedia.org/wiki/Capital_Jury_Project> (accessed 1 June 2009).
92. See Bersoff and Ogden, 1987; Hans and Vidmar, 1986:233–4; Kassin and Wrightsman, 1988:39.
93. See Anderson, 1974.
94. It is likely, of course, that cases in which there is strong evidence against the defendant or plaintiff may well be settled out of court and never reach jury trial.
95. Cited by Levett et al., 2005.
96. As would have been expected, Nietzel et al., 1999 found that 'enhancing' judicial instructions by translating them into non-technical English makes them more comprehensible to the jurors and, thus, more effective.

97. See also, Hans and Vidmar, 1986; Kassin and Wrightsman, 1988; Potas and Rickwood, 1984.
98. See Horowitz and ForsterLee, 2000; Heuer and Penrod, 1988, 1994a.
99. Hollin, 1989.
100. Goodman-Delahunty and Tait, 2006:64.
101. Arce et al., 1999.
102. See Devine et al., 2001; Levett et al., 2005; Memon et al. 2003, for reviews. See also, Hastie, 1993a; Levine, 1992 and Nietzel et al., 1999 for earlier reviews.
103. Cited in Hollin, 1989:168.
104. Cited by Levine, 1992:152.
105. See also Izzett and Leginski, 1974; Landy and Aronson, 1969; Ostrom et al., 1978.
106. Cite: BLD 0802060396.
107. Kalven and Zeisel, 1966; Zeisel, 1971; Saks, 1977; Kerr and MacCoun, 1985; Foss, 1981.
108. Both studies are cited by Antonio and Hans, 2001:69.
109. See New South Wales Law Reform Commission's (2007) report *Jury Selection* for a long list of recommendations to improve the state's jury system.

6 SENTENCING AS A HUMAN PROCESS, VICTIMS, AND RESTORATIVE JUSTICE

1. However, such expansion has not put an end to problems of the criminal justice system in England and Wales which include long delays in bringing criminal trials to court, adding to overcrowding in prisons (itself largely due to delays in Parole Board decisions) and delaying justice for victims because of lack of judges (*Times*, 30 July 2007, p. 13). Meanwhile in the United States, judges' low salaries and partisan elections threaten their integrity (*Economist*, 30 April 2007). Also due to a 'short fall' of £90 million to the budget of the courts service at the end of August 2008, trial delays in England and Wales may well worsen and some magistrates be made redundant (*Guardian*, 4 September 2008, p. 8).
2. For example, by more than one-third of the District and Supreme Court judges interviewed in Geraldine Mackenzie's (2005) study in Queensland, Australia.
3. Adam and Crocket JJ in *Willicroft* [1975] VR 292 at 300, and subsequently quoted with approval in R (1993) 71 A CrimR 95 at 112 by Sully J (cited by Mackenzie, 2005:19).
4. For example, in *Jurisc* (1998) 45 NSWLR 209 at 215 per Spigelman CJ; *Hayes* (1987) ACrimR 452 at 468 per Kirby J; and *Gooch* (1989) 43 ACrimR 382 (WA CCA, Brinsden J).
5. *Willicroft* [1975] VR 292 at 300, cited by Mackenzie (2005:17).
6. Justice Michael Kirby, 1995. Judicial stress. 13. *Australian Bar Review* at 101.

7. See Feeley and Rubin, 1999 for an account of how the judiciary in the United States reformed the country's prisons. In England and Wales, due to worsening prison overcrowding and appalling living conditions, a senior judge advocated the imposition of shorter terms of imprisonment (*Times*, 5 November 2007).
8. See Tata and Hutton, 1998b regarding computer support systems for discretionary judicial decision-making in sentencing.
9. See Freiberg and Ross, 1999 for a discussion of the experience in Victoria, Australia, with sentencing legislation in theory and practice.
10. The Sentencing Guidelines Council was established by the Sentencing Guidelines Council (Supplementary Provisions) Order 2004. Previously, the Magistrates' Association issued such guidelines (see, for example, the [British] *Magistrates' Association's Sentencing Guidelines* (1997) and, also, von Hirsch, 1998).
11. Cited by Greene and Ellis, 2007:192.
12. Citing Justice Michael Kirby, 1994. 'Reasons for judgement': always permissible, usually desirable and often obligatory. 12. *Australian Bar Review*, 121 at 123.
13. Cited by Lacey, Wells and Quick, 2003:100.
14. In the context of the European Union, according to Baker 1999, Community Law has a lot to say about the regulation and operation of the criminal justice system of the member states, including their sentencing laws.
15. Including attempts, incitements and conspiracies (Section 2).
16. See McConville and Mirsky, 1995 for an interesting ethnographic study of how guilty pleas are socially constructed.
17. However, the committee that reviewed the Criminal Courts of England and Wales under the chairmanship of Lord Justice Auld (2001) proposed a formalised system of plea-bargaining whereby the earlier the plea of guilty, the higher the sentence discount.
18. For a discussion of the various rationales for sentencing see Ashworth, 2000:62–78, 2007:992–8; Braithwaite, 1989; Mackenzie, 2005, and Walker, 1980. See also Wexler, 2001 regarding therapeutic jurisprudence (in other words, the study of the role of law as a therapeutic tool).
19. See *Herald Sun*, 1995, for some interesting Australian cases that illustrate this difficulty.
20. See Kapardis, 1985:23–4 for a discussion of the concept. See Wrightsman, 1999 for a discussion of how US Supreme Court judges decide a case and the role of the Chief Justice.
21. See the English Court of Appeal decision in *Reid* (1982) 4 CrAppR (S) 280 and the Australian High Court's decision in *Ryan v The Queen* [2001] HCA 21. See also, Walker and Padfield, 1996.
22. See Kannai, 1999 regarding structuring of judicial discretion in Israel by the Goldberg Committee and van Zyl Smit, 1999 for mandatory sentences in South Africa.
23. *Sunday Times*, 19 November 1995, p. 7.

24. Freiberg, 1999 explores the question of whether the sentencing policies of one country or jurisdiction can be said to be more or less severe than that of another and argues that one needs to distinguish sentence severity from the broader concept of ‘penal severity’.
25. See Lovegrove, 1997 for a discussion of theoretical and methodological issues in the psychological study of judicial sentencing. See Kapardis, 1985 for a detailed discussion of the different methods used to study variations in sentencing, and more, especially early, studies that have utilised each of the methods.
26. See also Everson, 1919; Willett, 1964.
27. See also Baab and Furgeson, 1967; Hogarth, 1971; Sutton, 1978.
28. See also Carlen, 1976; Darbyshire, 1980; Konečni and Ebbesen, 1979; Stewart, 1980.
29. See Henham, 1990 on magistrates; McCormick and Greene, 1990 in Canada and the Australia Law Reform Commission’s national survey of magistrates and judges in the 1970s (see Cashman, 1979). However, the judges in Victoria refused to take part in the national survey.
30. See Biafora and Warheit, 2007 for a study that demolishes a popular myth about race/ethnicity and violence in the United States.
31. CNN.com/world, 7 July 2003, ‘Grim motives behind infant killings’.
32. Gillies, 1993; Kapardis et al., 2003; Odubekum, 1992; Thomas, 1979.
33. See Heidensohn and Gelsthorpe, 2007 for detailed discussion.
34. For England and Wales, see *Sex Discrimination Act 1991*.
35. Allen 1987; Hedderman, 1994; Hood, 1992; Kapardis and Farrington, 1981; Mackay, 1993; Wilczynski and Morris, 1993.
36. Casburn, 1979; Mawby, 1977; Phillipotts and Lancucki, 1979.
37. Atkinson and Neuwman, 1970; Pope, 1975; Wilbanks, 1986.
38. Carter and Cleland, 1979; Clarke and Koch, 1976.
39. See Piliavin and Briar, 1964; Goldman, 1963; Forslund, 1970; Elion and Megargee, 1979; Stevens and Willis, 1979; Jefferson and Walker, 1992; Landau and Nathan, 1983.
40. See Macpherson, 1999 for the report into the Stephen Lawrence case.
41. Hagan, 1975, 1977; Rector and Bagby, 1995.
42. Eggleston, 1976; Snowball and Weatherburn, 2007; Walker and McDonald, 1995.
43. Mugford and Gronfors, 1978.
44. Brown and Hullin, 1992; Crow and Cove, 1984; Hudson, 1989; Kapardis and Farrington, 1981; Jefferson and Walker, 1992.
45. Schlesinger, 2005 utilised the State Court Processing Statistics 1990–2000: *Felony Defendants in Large Urban Counties* (US Department of Justice, Bureau of Justice Statistics, 2004).
46. See Aguirre and Baker, 1990; Applegate et al., 1994; Keil and Vito, 1990; Thomson, 1997; Williams and Holcomb, 2001.
47. Also, see Aboud and Levy, 1999 for a detailed discussion of various measures to reduce racial prejudice and discrimination in society.

48. For early research findings that a physically attractive person will be perceived more positively on a broad range of personality attributes see Dion et al., 1972; Goldman and Lewis, 1977; Miller, 1970.
49. See Bierhoff et al., 1989; Efran, 1974; Landy and Aronson, 1969; Sigall and Ostrove, 1975.
50. See President's Council on Competitiveness, Agenda for Civil Justice Reform in America 1–4 (*The Quayle Report*).
51. *Economist*, 30 June 2007.
52. Reported in the *Guardian*, 4 September 2008, p. 4.
53. By comparison, according to the same report, it will take women 200 years to achieve equal representation in Parliament.
54. See Cooney, 1993 for arguments of why it is important that women be appointed to the judiciary.
55. Cited by Goodman-Delahunty, ForsterLee and ForsterLee, 2005.
56. Cited by Goodman-Delahunty, ForsterLee and ForsterLee, 2005.
57. See also Ho and Venus, 1995; Rose, 1965; Solimine and Wheatley, 1995.
58. See Bowen, 1965; Gibson, 1978; Hogarth, 1971.
59. See Schubert, 1959; Walker, 1972.
60. See Hogarth, 1971; Kapardis, 1984, 1985; Spreutels, 1980.
61. *Economist*, 7 July 2007, p. 49.
62. Whose discretions has been increasingly controlled, especially since the *Criminal Justice Act 1991* (as amended by the *Criminal Justice Act 1993*).
63. See Lovegrove 1997 for an Australian simulation study and a model of sentencing which also considers judges' intuition in deciding on what sentence to impose.
64. See Segal and Spaeth's (1993) book *The Supreme Court and the Attitudinal Model*.
65. For this section I have, *inter alia*, drawn on the article by Takakashi, 2005 and the books by Weitenkamp and Kerner, 2002 and Walgrave, 2002.
66. See Nicholas et al., 2005 concerning the *British Victim Survey* and Catalano, 2005 regarding the *US National Crime Victimization Survey*.
67. See Van Kesteren, Mayhew and Nieuwebeerta, 2000; Krug et al., 2002.
68. For a discussion of the terms 'victims' and 'victimisation' see Sandra Walklate's (2002), Reflections on 'victims' and 'victimisation': an autobiography of ideas, in I.K. McKenzie and R. Bull (eds) *Criminal Justice Research: Inspiration, Influence and Ideation* (pp. 31–49). Dartmouth: Ashgate.
69. Endemic, for example, in Turkey where 33–50 per cent of women are victims of physical violence in the home (Amnesty International, 2005:5).
70. See Goodman-Delahunty, 2000 for detailed discussion, cited by Bartol and Bartol, 2004b.
71. Cited by Takakashi, 2005.
72. See Doak, 2005 concerning a proposal that victims participate actively in criminal hearings as victims do in many European jurisdictions.
73. See A. Graycar, 1999, *New Research on Victims of Crime in Australia*.

74. In Victoria, the *Victims' Charter Act* was passed on 29 August 2006 and became law on 1 November 2006.
75. The services listed are: all police forces for police areas in England and Wales, the British Transport Police and the Ministry of Defence Police; Crown Prosecution Service, Her Majesty's Court Service, joint police/Crown Prosecution Service Witness Care Units, Parole Board; Prison Service; Local Probation Boards; Youth Offending Teams, Criminal Compensation Authority; Criminal Injuries Compensation Appeals Panel; Criminal Cases Review Commission.
76. Provided in England and Wales, for example, in the *Human Rights Act 1988*, and the *Sexual Offences Amendment Act 1992*.
77. See von Hirsch 1993, 1998.
78. Cited by Takakashi, 2005:23.
79. Citing Braithwaite, 1999.
80. For detailed discussion of whether restorative justice and criminal justice are competing or reconcilable paradigms, see the book with the same title by von Hirsch et al., 2002.
81. This is not negated by the fact that sentencing legislation (*Sentencing Act, 1991*) in some jurisdictions (for example, Victoria, Australia) states the factors and the principles the court should take into consideration in deciding sentence.

7 THE PSYCHOLOGISTS AS EXPERT WITNESSES

1. Plowd 118 at 124; 75 ER E2 at 191. The first psychologist to testify in the United States at a civil trial was Karle Marbe at around 1911.
2. See also Kargon, 1986 regarding the historical development of the expert witness and the Special Issue of *Law and Human Behaviour* 16(3) on expert evidence.
3. 88 W.Va 479, 107 SE 189 (1921), cited by Bartol and Bartol, 2004b:9.
4. Cited by Spinney, 1997.
5. Section 79 *Evidence Act 1995* (Cth), *Evidence Act 1995* (NSW) and *Evidence Act 2001* (Tas.).
6. This rule states that 'the evidence of an opinion is not admissible to prove the existence of a fact about the existence of which the opinion was sought (Freckelton and Selby, 2005:57).
7. For a detailed discussion of the roles of the forensic psychologist see the book by Gudjonsson and Haward, 1998, and Blau's 1998 book (2nd edition) for a thorough text on the psychologist as expert witness in the United States.
8. Citing Hodgkinson, 1990:52.
9. See chapters 3, 4, 5, 6 and 7 in Freckelton and Selby (2005) for detailed discussion of the five rules.
10. See Carson, 1992; Edmondson, 1995; Freckelton 1990, 1993; Gudjonsson, 1992b, 1995b; and Nijboer, 1995 for discussions of this, and Loftus and Ketcham, 1991 regarding the experience of appearing as an expert witness for the defence in US courts.

11. See Smith, 1995 for some difficulties in the idea of a court expert.
12. See Malsch and Freckelton, 2005 concerning the use of expert evidence in Australia and the Netherlands.
13. See American Psychology Law Society (1991) and Committee on Ethical Guidelines for Forensic Psychologists (1991) for details.
14. The expert concerned was William Marston, a pioneer in the use of the polygraph to detect lying.
15. For this comment Freckelton and Selby (2005) cite Weinstein and Berger's (1985) book on evidence, paras 702 (03), 702 (06). See also Golan (2004) for detailed discussion.
16. Quoted in Landsman, 1995:155.
17. See Gutheil and Stein, 2000 for a discussion of the challenges posed by *Daubert* and its progeny *Joiner* and *Kumho* for psychology and psychiatry.
18. Cited by Gutheil and Stein, 2000:246.
19. See also *The Ikarian Reefer* [1993 2 Lloyds Rep. 68. *R. v. Kai-Whitewind* [2005] All ER (D) 14 (May) was also considered.
20. Voice identification is recognised as an expert field in England (see *R v. Robb* (1991) 93 Cr. App.R. 161 at 165; EE, 1(1):20).
21. See Francis, R. (2007a, 2007b) two-part article on the *Peter Ellis* case in New Zealand concerning the expert opinions proffered, the ministerial enquiry and the subsequent enquiry by Parliament's Justice and Electoral Select Committee.
22. In *R v. McFelin* (1985) the New Zealand Court of Appeal also endorsed the safeguards concerning evidence under hypnosis in s.795 (a)(3)(D) of the Californian Evidence Code but allowed the judge discretion as to how far to comply with those safeguards (Freckelton and Selby, 2005:162).
23. See Freckelton, 1990:56 who cites *R v. Holland* (1981) 6 WCB 177; *R v. Scoppelliti* (1981) 34 OR (2d) 524 at 531; *R v. Clark* (1983) 1 DLR (4d) 46.
24. See Freckelton, 1993:111 for details.
25. See Freckelton and Selby, 2005:873–906 for detailed advice to expert witnesses by two very experienced and highly respected barristers.
26. Source <<http://library.findlaw.com/2005/jul/22/186441.html>>.

8 DETECTING DECEPTION

1. See the books by Vrij, 2008 and by Granhag and Strömwall, 2004a for an excellent review of the state of knowledge about deception-detection in forensic contexts.
2. See also Block et al., 1992; Jacobs, 1993a, 1993b; Pogrebin and Poole, 1993 regarding the use of undercover agents by the police.
3. Citing Bok, 1978:13.
4. See Waller and Williams, 2005 for discussion of various 'dishonesty' offences as well as the issue of definition of 'dishonesty'.

5. For an excellent discussion of the deception-detection literature, the reader should read Vrij's 2008 2nd edition of his book, published as the manuscript for this book was being completed.
6. See Hyman, 1989:140–3 for non-human deception.
7. See Vrij, 2000 for a comprehensive review.
8. Citing Goldberg et al., 1991; Ones et al., 1993 and Sackett et al., 1989.
9. The website <www.hirework.org/honestytests.html> was last accessed 30 November 2007.
10. See also Navarro and Schafer, 2001 for similar but more comprehensive advice by two FBI special agents.
11. See Strömwall, Granhag and Hartwig, 2004 for detailed discussion.
12. The present author was part of the Global Deception Team, 2006 and carried out the research in Cyprus.
13. Fessler, 1999 and Argyle and Cook, 1976 are cited by the Global Deception Team, 2006.
14. Bugent et al. and its source is mentioned by Granhag and Vrij, 2005:49.
15. For an excellent discussion of cues to deception and a broad range of related issues, see Vrij, 2008.
16. Cited by Vrij, 2008.
17. Cited by Vrij, 2008.
18. See Hall, 1986; Horvath, 1973; Horvath, Jane and Buckley, 1994 and Vrij, Edward and Bull, 2001. These studies are cited by DePaulo and Morris, 2004.
19. Cited by Granhag and Vrij, 2005.
20. For a pessimistic conclusion on the use of demeanour evidence to detect lies see Wellborn III, 1991, but see Ekman and O'Sullivan, 1989 for useful advice for questioners.
21. Cited by Granhag and Vrij, 2005.
22. Cited by Granhag and Vrij, 2005.
23. See Bull, 2004 regarding training to detect deception from behavioural cues.
24. Cited by Miller and Stiff, 1993.
25. Cited in Garrido and Masip, 1999:16.
26. Cited by Vrij, 2008.
27. Cited by Bull, 2004.
28. Citing Smith, 1967, Bartol and Bartol, 2004a attribute the said practice to the ancient Chinese and refer to 'rice powder' instead of 'rice' and whether the rice powder spat out was wet.
29. Information provided by the American Polygraph Association, <www.polygraph.org> (accessed 1 June 2009).
30. For example, *People v. Lippert*, 466 NE 2d 276; 47 ALR 4th 1183 (1984 5th Dist); *State v. Kersting*, 623 P 2d 1095 (1981); *Castillo v. State*, 739 SW 2d 280; cert den and app dismd 487 US 1228 (Tex 1987), cited in Freckelton and Selby, 2002:201.
31. *U.S. v. Schefer*, 523 U.S. 303 (1998), with Justice Paul Stevens dissenting.

32. See Honts, 2004 for detailed discussion of CQT.
33. See Honts, 2004:115–16 concerning six characteristics a properly conducted polygraph CQT examination should have.
34. See Raskin, 1989b, and Iacono, 1995 for details of the procedure used with this and the other techniques.
35. Cited by Granhag and Hartwig, 2008a:147.
36. See Table 5.2 in Vrij, 2007:91.
37. See also Elaad, 1990, 1998; Elaad et al., 1992 and Iacono and Lykken, 1997.
38. Cited by Honts, 2004.
39. See Table 5.3. in Vrij, 2007:92.
40. See Ames' KGB controller's interview in the *Sunday Times* (8 February 1998, p. 21), explaining how he helped him to pass polygraph tests.
41. See Gudjonsson, 1988 for a good discussion of this topic.
42. The results were presented at the 2001 annual meeting of the Society for Neuroscience in San Diego, California (*Times*, 12 November 2001, p. 11).
43. Cited by Granhag and Hartwig, 2008a:149.
44. See <www.brainwavescience.com/ExecutiveSummary.php> (accessed 1 June 2009).
45. See pp. 101–19 in Gudjonsson and Haward, 1998 for a discussion of psycholinguistic techniques and their use, including the forensic context.
46. Patty Hearst came from a wealthy family and was imprisoned for a number of crimes (including armed robbery) which she committed while a member of the Symbionese Liberation Army. At her trial it was alleged she had been brainwashed into joining that terrorist organisation while she was its captive.
47. See Gudjonsson, 1992a for discussion of this technique.
48. The criteria are also listed in Marxsen et al., 1995:445.
49. CBCA criteria listed by Vrij, 2000:117 are adapted from Steller and Köhnken, 1989.
50. See <<http://lsiscan.com/id37.htm>> (accessed 1 June 2009).
51. Citing Sapir, 1991, 1993.

9 WITNESS RECOGNITION PROCEDURES

1. Police Orders, 1860 and Home Office, 1905 are cited by Wells, 2005.
2. (Cmnd 2315).
3. Brandon and Davies, 1973 listed 70 cases in which an innocent person had been convicted, largely as a result of eyewitness identification.
4. Cited by Fisher and Reardon, 2007.
5. See *Police and Criminal Evidence Act 1984*, Code of Practice for the Identification of Persons by Police Officers. The most recent update of the Code came into effect on 1 February 2008.
6. See *R v. Burchielli* ((1981) VR 611) regarding similar guidelines for the judiciary in Victoria, Australia.

7. *R v. Curry and Keeble* [1983] Crim.L.R. 737, CA.
8. *R v. Slater* [1995] 1 C.App.R. 584, CA.
- 9 See Joyce, 1993 for evidence that only a minority of the general public in England might be able to understand properly a lot of the information contained in the (1991) revised Codes of Practice, *Police and Criminal Evidence Act 1984*.
10. See Borchard, 1932; Brandon and Davies, 1973; Frank and Frank, 1957; Rattner, 1988.
11. Cited by Davies, 1989.
12. Cited in Thomson, 1995a:142.
13. Cited by Cutler et al., 1994:181.
14. For a review of the authorities concerning the use of images of offenders, see Attorney-General's reference (no. 2 of 2002) [2003] 1 Cr.App.R. 21, CA.
15. See *Police and Criminal Evidence Act 1984*, Annex D for procedures to be followed for a showing of photographs in England and Wales.
16. See Downey 1994, *Times*, 5 April, and *Fremantle v. R* (1994) *Times*, 7 July, for cases where the warning was not given but the appeal failed.
17. See Brown et al., 1977; Hilgendorf and Irving, 1978; Loftus, 1974, 1976.
18. See Buckhout, 1974; Brown et al., 1977; Gorenstein and Ellsworth, 1980; Loftus, 1976; Peters 1985, in Ross et al., 1994b; Read et al. 1990, Experiment 5; and Ross et al. 1994b.
19. *R v. Jones and Nelson*, *Times*, 21 April, 1999, CA.
20. For relevant case law I have drawn on Archbold, 2008:14–38.
21. *R v. Vaughan, Independent*, 12 May 1997, CA (96 06431 Y3).
22. *R v. Joseph* [1994] Crim.L.R. 48 CA.
23. See Brigham, 1989; Malpass and Devine, 1983; Wagenaar and Veefkind, 1992.
24. Cited by Fisher and Reardon, 2007.
25. See *R v. Cormack* ((1981) 5 CrLJ 163); *R v. Kehagias, Leone and Durkic* ((1985) V.R 107).
26. Regarding the use of make-up on identification parade volunteers to enhance their resemblance to the suspect, see *R. v. Marrin*, *Times*, 5 March, 2002.
27. *R v. Forbes* [2001] 1 A.C. 473, HL.
28. Cited in Wells et al., 1994:225.
29. Cited in Clifford, 1981.
30. See Cutler and Penrod, 1988; Lindsay and Wells, 1985; Lindsay et al., 1991a, 1991b; McQuiston-Surrett, Malpass and Tredoux, 2006; Parker and Ryan, 1993; Sporer, 1993 and Steblay et al., 2001.
31. See Davies and Valentine's (1999) discussion of Wells et al.'s (1998) (panel of experts) recommendations in the United States.
32. Cited by Valentine, 2008.
33. See Turner, 2000 for an attempt to overcome 'overshadowing' by constructing the *E-Fit* within a 'minimal face' which provides a face context without the possibility of overshadowing.
34. Cited by Clifford and Davies, 1989:54.

35. Bruce, Pike and Kemp, 2000; Bruce et al., 2002; Davies, Van Der Willick and Morrison, 2000; Frowd, Hancock and Carson, 2004.
36. See Bull, 1981; Bull and Clifford, 1984; Clifford et al., 1980; Clifford and Davies, 1989; Hammersley and Read, 1995; Thomson, 1995a:133–5; and Yarmey, 1994, 1995 for literature reviews.
37. Here I have drawn on Archbold, 2008:14–52.
38. *R. v. Hersey* [1998] Crim.L.R. 281, CA; *R. v. Roberts* [2003] Crim.L.R. 183, CA.
39. Issued in December 2003.
40. Cited in Home Office Circular 057/2003.
41. Reported in *Expert Evidence*, 1994, 3(2):87.
42. *United States v. Hauptman* (1935) *Atlantic Report*, 180, 809–29, cited in Yarmey, 1995:262.
43. See *R v. Gilmore*, (1977 2 NSWLR, 935); *R v. McHardie and Danielson* (1983 2 NSWLR,763); *R. v. Robb*, (93 Cr.App.R. 161).
44. See Hammersley and Read, 1995 for a review of the empirical literature on earwitness identification.
45. In Yarmey, 1995.
46. In Yarmey, 1995.
47. Goldstein and Chance, 1985; Hammersley and Read, 1985; Read and Craik, 1995; Yarmey and Matthys, 1992.
48. Cited in Yarmey, 1995.
49. Cited in Yarmey, 1995.
50. Clifford, 1980; Clifford and Denot, 1982; Orchard, 1993; Reich and Duke, 1979, cited in Yarmey, 1995; Saslove and Yarmey, 1980.
51. Cited by Bull and Clifford, 1999:2000.

10 PSYCHOLOGY AND THE POLICE

1. See Blackburn, 1993; Feldman, 1993.
2. See Kapardis, 1988, 1989, 1990a for intimate and stranger homicide, including monoepisodic mass murder.
3. See Blumberg, 1994; Fridell and Binder, 1992; Kapardis, 1990a; Vrij et al., 1995.
4. Mortimer, 1991; Stalans and Finn, 1995.
5. See Bartol and Bartol, 2004b:31ff. for an account of its development.
6. See Bartol and Bartol, 2004b:463–8 for a discussion of the literature on personnel selection.
7. The books by Ainsworth, 2002 and Bartol and Bartol, 2004a, provide a very good discussion of issues in police selection and training as well as other topics considered in this chapter.
8. This section draws partly on Burbeck and Furnham's 1985 review.
9. Cited in Ainsworth, 1995:136–7.
10. See Bennett and Greenstein, 1975 Griffith and Cafferty, 1977; Teahan, 1975.
11. Cited by Stephenson, 1992:115–16.

12. See Bayley and Mendelsohn, 1969; Carlson et al., 1971; Colman and Gorman, 1982.
13. The said syndrome refers to someone who is excessively serious, emotionally cold, authoritarian in attitudes and rigid in how problems are to be solved.
14. See also, Feldman, 1993:98; Policy Studies Institute, 1983; Scarman, 1981.
15. See Cunneen, 1990; Hazlehurst, 1988; Johnston, 1991.
16. See Kenrick, Neuberg and Cialdini, 2002: 376–415, for the social psychology of these phenomena.
17. *Wilkins v. Maryland State Police*, Civil Action No. CEB-93–483 (D.Md. 1993), cited by Bartol and Bartol, 2004a:479.
18. Cited by Bartol and Bartol, 2004a.
19. Cited by Bartol and Bartol, 2004a.
20. Harris, 2002, 2005 and Miller et al., 2007 are cited by Miller et al., 2008.
21. For police prejudice and discrimination in Britain I have drawn largely on Bowling and Foster, 2002 and Phillips and Bowling, 2002.
22. See Bull et al., 1983, Ainsworth, 1995; Stein, 1986.
23. The examples given to illustrate are the present author's.
24. Cited in Stephenson, 1992:126.
25. The revised Codes of Practice came into effect on 31 December 2005 (see Home Office Circular 56/2005). The Codes of Practice were further revised and came into effect on 1 February 2008 (see Home Office Circular 2/2008).
26. See Baldwin and McConville, 1980b; Leiken, 1970; Softley et al., 1980.
27. Practice Direction (Crime: Tape Recording of Police Interviews: Preparation for Proceedings in the Crown Court), 89 Cr.App.R. 132.
28. This technique is ethically very questionable because of its likely impact on an innocent suspect, including the likelihood of eliciting a false confession (Moston, 1996:94).
29. Cited by Sear and Williamson, 1999.
30. See *Frazier v. Cupp* at 394 (1969) and *People v. Payton* (1984) on this, cited by Sear and Williamson, 1999:73–4.
31. Cited by Tousignant, 1991.
32. See, for example, the 'Reid Technique of interviewing Interviewing and interrogation' (also known as the 'Behavioral Analysis Interview') which is taught widely in the United States (Buckley, 2006; Inbau et al., 2001; Reid and Arther, 1954).
33. Citing Reid & Associates, 1986:44.
34. Citing Swanson et al., 1988:210.
35. For a more laconic account of the Reid Technique, see Buckley, 2006.
36. As for Baldwin, 1992 and Williamson, 1993.
37. Cited in Stephenson, 1992.
38. See Archbold, 2000:1464–96, regarding confessions and related matters under the *Police and Criminal Evidence Act 1984*.
39. Cited in Gudjonsson and Sigurdsson, 1994.

40. See Richardson and Kelly, 1995; Torpy, 1994.
41. See Home Office Research and Statistics Department, Research Bulletin No. 35, 1994.
42. Cited in Ainsworth, 1995.
43. Cited by Howitt, 2002:243, and Memon, Vrij and Bull, 2003:81.
44. These categorisations are cited by Memon, Vrij and Bull, 2003:76.
45. See Gudjonsson, 1984.
46. See Gudjonsson, 1987.
47. Like Kassin, 1997.
48. For the recommendations listed I have drawn on Williamson, 2004 and Memon, Vrij and Bull, 2003.
49. In England an Independent Prosecution Service was introduced in 1986 following the *Prosecution of Offences Act 1985*.
50. This is so in the UK but not in the United States.
51. Section 76 of PACE shifted the onus from the defence to the prosecution, thus introducing a requirement for additional corroborative evidence that the confession was not false.
52. This requirement was introduced in England by the *Youth Justice and Criminal Evidence Act 1999*.
53. In England it was introduced by s.23, *Criminal Procedure and Investigations Act 1996*.
54. Introduced in England by the *Criminal Appeal Act 1995*. According to Williamson, 2004:50, it had reviewed over 4000 cases and referred over 100 to the Court of Appeal.
55. There has also been a recommendation by the Home Affairs Select Committee (2002) to broaden the test for referring cases of alleged miscarriages of justice to the Court of Appeal.
56. The reader should note, however, that the citizen rights articulated in *Miranda*, 384 US.436 (1966) have been subsequently consistently watered down by the US Supreme Court (Williamson, 2004:51).
57. About two very experienced offender profilers, namely, academic psychologist Julian Boon and psychiatrist Richard Baddock.
58. See Ainsworth, 1995, 2000a:182–201; Canter 1995; McCann 1992.
59. Ressler and Schachtman, 1992, 1997; Douglas and Olshaker, 1995, 1999, 2000; Hazelwood and Michaud, 2001 (for further details see also References).
60. Citing Ault and Reece, 1980.
61. See Hazelwood and Burgess, 1987 for a typology of rapists.
62. See Holmes and Holmes, 2002:76–80 for details of the organised murderer.
63. See Holmes and Holmes, 2002:72–6 for details of the disorganised murderer.
64. A non-parametric alternative to factor analysis.
65. See Merry and Harsent, 2000; Barker, 2000; Farrington and Lambert, 2000.
66. See Alison et al., 2000; Kapardis, 1989.
67. See Fritzon, 2000.

68. See Robertson, 2000.
69. See Kapardis, 1990a for an empirically-based typology of stranger killings and how such killings differ from domestic and other intimate homicides.
70. See Rossmo, 1997 for details.
71. Such investigative strategies described by Rossmo, 1997:170–4, include patrol saturation and static stakeouts, neighbourhood canvasses, suspect prioritisation and/or postal code prioritisation to search through police databases and/or to conduct large-scale DNA testing.
72. See Bartol and Bartol, 2004a:69–73 for a discussion of profiling of potential hijackers.
73. See Bond, 2004, 2005 for these two and other cases.
74. Cited by McCormick, 2003:474.
75. Cited by Silke, 2008:100.
76. Cited by Silke, 2003a.
77. Cited by Silke, 2008:104.
78. The term ‘greater jihad’ refers to someone’s personal struggle to live a useful and charitable life by complying with God’s commands as understood within Islam (Silke, 2008:100).

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