FORENSIC PSYCHIATRY AND FORENSIC PSYCHOLOGY

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Forensic Psychology, Education, Training and Certification

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Introduction

Psychologists were involved in the judicial system as early as the late nineteenth century. This article is written from an American perspective on forensic psychology. While roughly comparable developments have occurred in Canada, the UK, Australia, New Zealand, Europe, and a few other countries, the status of training and credentialing is different, and thus local laws and scholarly literatures should be consulted. However, psychologists (as opposed to psychiatrists) did not become significantly involved in forensic applications until the broader field of clinical psychology began to receive funding from the Veterans Administration and the National Institutes of Mental Health (NIMH) to support training and research after the end of World War II. An educational and training model for clinical psychologists, the so-called "Boulder Model" was developed in 1949 and the American Board of Examiners in Professional Psychology began to grant diplomate status to certify advanced competencies for clinical psychologists at approximately the same time. As psychologists became increasingly involved in the judicial system, an economically based competition with psychiatrists became inevitable, and the American Psychiatric Association, in 1954, attempted to assert that only medically trained psychiatrists should be allowed to offer testimony in judicial forums about mental "illnesses." Forensic psychologists involved in both clinical and research contexts continued to struggle to establish their specialty in a rather uncoordinated fashion until three seminal events occurred.

The *Jenkins* Case: Status of Expert Witnesses

First, in 1962, Judge David Bazelon, a leading mental health law jurist, wrote the majority opinion in *Jenkins* v. *United States*. The *Jenkins* case was an appeal of a trial judge's instruction to the jury that they could disregard the forensic evidence offered by Jenkins' forensic psychologists because, as psychologists, they were not qualified to offer expert testimony on the issue of mental illness. In a scholarly *tour de force*, Judge Bazelon argued that it was the expert's training, knowledge, and expertise that formed the basis for acceptance or rejection as an expert witness, not the nature of their title or degree. This powerful opinion by a respected jurist helped to remove the previously unchallenged assumption of the

superiority of psychiatry and placed the focus directly upon the quality, nature, and extent of an expert's knowledge and the scientific status of that knowledge. Since forensic psychologists differ from forensic psychiatrists primarily by a relatively stronger focus on the empirical foundations of forensic knowledge, this decision had the additional impact of encouraging the formation of empirically based forensic training programs more consistent with traditional psychological than with psychiatric training models.

Establishment of the Center for Studies of Crime and Delinquency

Second, in 1968, Saleem Shah became the director of the NIMHs Center for Studies of Crime and Delinquency. Between 1968 and his untimely and tragic death in 1992, he spearheaded the funding of a variety of seminal forensic psychology research grants that helped to lay the empirical and conceptual foundations of the discipline. In addition, he helped to introduce many first-generation forensic psychologists to each other thus extending further the development of the discipline by making individuals aware of the work of others.

The American Psychology-Law Society

The third development, also in 1968, was the organization of the American Psychology-Law Society (APLS) which began formal operations the following year. The formation of this group has proven to be a critical step in the development of forensic psychology as a discipline because it allowed for the routine exchange of scientific and professional knowledge, provided a network for trainers and students, and was pivotal in the development of ethical and professional standards. Eventually, APLS merged with Division 41 (Psychology and Law) of the American Psychological Association (APA), and in 2001, forensic psychology was officially recognized as a specialty by the Commission for the Recognition of Specialties in Professional Psychology (CRSPP), an organizational unit of the APA.

Definition of the Field of Forensic Psychology

Forensic psychologists organized and defined their discipline, adopted a broad and inclusive definition of their field in recognition of the many areas of psychological scholarship, research, and practical competencies that produced expertise of relevance to the judicial system as a whole. Thus, *Specialty Guidelines for Forensic Psychologists*, a set of ethical and professional guidelines adopted by APLS/Division 41, defined "forensic psychology" as:

> all forms of professional psychological conduct when acting, with definable foreknowledge, as a psychological expert on explicitly psycholegal issues, in direct assistance to courts, parties to legal proceedings, correctional and forensic mental health facilities, and administrative, judicial, and legislative agencies acting in an adjudicative capacity.

When forensic psychology was recognized as a specialty by CRSPP, very similar language was used. Thus, while the majority of forensic psychologists are trained in programs that emphasize applied aspects of psychology such as clinical psychology or neuropsychology, a sizeable group work in areas such as social, developmental, experimental, and physiological psychology. What they share in common is applying psychological knowledge to issues of legal relevance. The result is an extreme broad array of conceptual, empirical, and practical "psycholegal issues," as is apparent from inspection of the table of contents of widely cited "psychology and law" handbooks and from scholarly articles attempting to define forensic psychology. This conceptual, empirical, and practical breadth has some interesting implications for models of education and training. In 1995, a conference organized by the leaders of broadly defined forensic psychology explicitly acknowledged that diversity of appropriate training models was required because of the breadth of the discipline.

Training Models

There are a wide variety of doctoral training models in forensic psychology. Nine graduate programs offer forensic psychology training in either clinical or nonclinical areas; four of these also offer dual psychology and law degrees (the extent to which individuals with dual degrees remain professionally active in both fields is not clear). Eight graduate programs offer forensic psychology training exclusively oriented towards clinical issues and 11 programs (two of which are dual degree programs) offer exclusively nonclinical forensic training programs. In addition, an unknown number of forensic psychologists are trained in graduate psychology departments without specialized programs but with one or more faculty members who specialize in forensic psychology. A variety of postdoctoral programs, as well as other training in forensic facilities are also available.

Given this wide array of training models, it is difficult to describe "forensic psychology training," but

most programs tend to share a common training assumption that derives from the "forensic" aspect of the discipline. That is, the adjective "forensic" implies that the professional and scholarly aspects appear in public and legal settings and subjected to legal scrutiny, debate and cross-examination. While psychological theories and data are subjected to scientific scrutiny in research and scholarly settings, a different set of rules and issues arise when those theories and data are admitted as evidence in a legal setting. While the evidentiary "hurdles" that psychological evidence must pass are increasingly seen in terms familiar to psychological scientists as reflecting a Popperian view of science, legal disputation is fundamentally different from scientific disputation. As a consequence, forensic training programs, whether they emphasize clinical, developmental, experimental, neuropsychological, or social aspects of the discipline must prepare students for the legal scrutiny of their scholarly and professional products. In "normal" clinical work, for example, an assessment report may be reviewed by another professional, but will not be subjected to rigorous scrutiny or cross-examination (perhaps the quality of psychological products, whether published in scientific journals or used in professional settings, would be improved if they were more routinely subjected to such scrutiny). Thus, this fundamental "forensic" assumption gives rise to a series of distinctive characteristics. The nature of some of these is readily seen in forensic clinical psychology. Role relationships between forensic clinicians and those that they evaluate or treat are fundamentally and systematically different to traditional clinician–client role relationships. In fact, the "client" in such relationships is generally an attorney or a court, not the person evaluated or treated. There are corresponding major differences with respect to issues of privilege and confidentiality, record keeping, and reporting requirements. Forensic clinical assessments often involve specialized assessment techniques and instruments that focus on distinct psycholegal constructs and employ special methods that often target deceptiveness and collateral sources of information. Basically, forensic clinical psychologists are trained in the details of the legal issues and adjudicative processes in which they participate, though most often they do not complete law degrees in spite of participation.

Qualifications in Forensic Psychology

While APA and CRSPP officially recognize forensic psychology as a specialty, these organizations do not award advanced certification of specialization or diplomate status to particular individuals. Within the USA, diplomate status has been traditionally granted by the American Board of Forensic Psychology (ABFP), which is part of a larger organization, the American Board of Professional Psychology (ABPP). ABFP and ABPP have many administrative and professional links with APA, but are separate. Other organizations also grant diplomate status in forensic psychology, but problems associated with their procedures will be discussed subsequently.

Diplomate status from ABFP "attests to the fact that an established organization of peers has examined and accepted the Diplomate as functioning at the highest level of excellence in his or her field of forensic competence." It is important to note that when ABFP was formed in 1978, the original members of the organization did not "arbitrarily declare" themselves as diplomates. Rather, each one was examined by others in the founding group, to ensure that they possessed the higher level of training, skill, and knowledge expected of a "diplomate." The current examination process is extremely rigorous and essentially involves the following steps. An applicant must first be accepted as a candidate. To become a candidate the individual should: 1. Be a doctorate from an accredited institution in the USA or Canada. 2. Be either a licensed psychologist or work as such in a statutorily recognized way. 3. Have at least 1000 h of forensic psychology experience, most of which must be accumulated postdoctorally. 4. Be free from a history of adjudicated ethical or professional complaints. 5. Have at least 100 hours of specialized training in forensic psychology.

The second stage of the ABFP process is an evaluation of professional work. Each applicant is required to submit samples of work in two professional work areas that reflect their advanced expertise in those areas of forensic psychology. These work samples are reviewed by two examiners according to published criteria. Finally, an applicant undertakes both a written examination concerning advanced knowledge of forensic psychology and associated legal issues, and an oral concerning ethical and professional issues and aspects of the candidate's own chosen aspects of particular expertise. Data from a two-year period, for example, 1995–1997 demonstrate the rigors of the examination process. During that period, 39% of the applicants whose credentials were substantiated failed because of the nature of their professional work samples. Of those who qualified for the final stage, 48% failed.

Vanity Diplomas

Whether due to the rigors of the examination process, economic incentives to obtain "advanced

certification or diplomate status" in forensic psychology, or other unknown considerations, a cottage industry of "vanity" diplomate boards has grown up in the USA in the 1990s. Originally, such vanity boards, as described in articles in the *Wall Street Journal*, the *American Bar Association Journal*, and elsewhere were clearly in the business of "sheepskins for sale." They routinely granted diplomate status on the basis of weak criteria, had few or no mechanisms for checking on the validity of claimed experience, never appeared to turn anyone down who had applied, required no peer review of professional work, and had no other mechanisms for verifying the applicant's advanced levels of knowledge, skill, and experience. Sufficient alarm about the impact of the flood of such "vanity" certified experts, in a host of different professional fields, led to strong cautionary statements being published in professional mental health journals and in materials being circulated to sitting judges and practicing attorneys. Although those witnesses not possessing accredition are not automatically presumed to be unsuitable for providing expert testimony, there is a focus on the necessity to scrutinize carefully the nature of an expert's claimed expertise and certification as a "specialist," "diplomate," or "board certified" expert.

Any internet search using the terms "diplomate" and "forensic" will now uncover a dizzying array of hits and organizations. The real task facing a consumer (whether an attorney, judge, or juror) in understanding what a given expert's "diplomate" status means and does not mean has become enormously more difficult since the first publications analyzing vanity boards, "check-book" diplomates, and the like. Many of the organizations originally criticized for their lax procedures, no meaningful examinations, "grandfathering," or having little or no review of work have now begun to change their publically announced requirements and procedures. Whether or not such announcements reflect any meaningful change awaits further demonstration and documentation. Thus, while many now announce an "examination" as part of the process, it is unclear whether they meaningfully assess the types of advanced competencies and knowledge reflected by the meaning commonly associated with "diplomate" or "board certified." For example, one of the original "examinations" from such organizations contained the following question: "In giving testimony at a deposition, it is appropriate to engage in shouting matches or arguments with abusive attorneys. True or false?". The adoption of meaningful examinations will in part be indexed by the number of applicants who fail.

Administrative Procedures for Certification and Regulation

Other than the general cautions and caveats published by professional psychological and legal organizations, some states in the USA have begun to adopt more aggressive administrative procedures or institute statutory regulation. For example, California has given the term "board certified" administrative meaning by requiring that physicians may not describe themselves as "board certified" unless the "board" uses meaningful and psychometrically valid testing procedures to examine whether or not the physician has the required education, training, and experience expected of a "board certified" specialist. The regulations which implement this statute specify a set of boards that qualify and also provide a set of criteria by which to evaluate "applicant boards" not specifically listed. This mechanism for regulating use of "board certification" was upheld in a recent decision by the Ninth Circuit Court of Appeals. The logic of this decision comports with other professional analyses of the problem of separating the wanted from the unwanted by focusing upon the meaningfulness and rigor of the review and evaluation process. Logically, it must also be noted that having had one's training, knowledge, and skill examined and "certified" at one time does not guarantee a similar status in future. Similarly, not being a "diplomate" or "board certified" does not carry the logical or empirical implication that a particular expert is less qualified than someone who has undergone a rigorous examination of knowledge and skills. However, having chosen to obtain a "certification" from a vanity board as opposed to rigorous peer scrutiny, does have other logical implications that may be effectively pursued during rigorous cross-examination. If the cross-examiner can effectively link an expert's choice to obtain a "vanity diploma" with questions about the adequacy or rigor of his or her methods and reasoning, a particularly forceful synergy is accomplished. Obviously, having a "traditional" diplomate in forensic psychology does not guarantee current competence, professionalism, or the correctness of opinion. However, it does guarantee that the individual has chosen to have his or her professional work peer-reviewed, has had the nature, quality, and adequacy of their professional forensic training scrutinized, and has stood for a wide-ranging and meaningful examination of specialized and general knowledge of forensic psychology, and of ethical and professional standards of practice. The alternative choices end up speaking for themselves to triers of fact if they are explored in functional detail, either during *voir dire*

or cross-examination. An additional and apparently unappreciated legal consequence of presenting himself/herself as a "diplomate" or "board certified" is that this sets the standard of care to which they will be held in any tort action.

Further Reading

American Board of Forensic Psychology (2004) Brochure. Accessed 1/15/2004 at www.abfp.com/brochure.asp.

Baldwin M, Watts B (1996) A survey of graduate education and training experiences in psychology and law. *American Psychology-Law Society Newsletter* 16: 10–11.

Cattell JM (1895) Measurements of the accuracy of recollection. *Science* 2: 761–766.

Farkas G, DeLeon P, Newman R (1997) Sanity examiner certification: an evolving national agenda. *Professional Psychology: Research and Practice* 28: 73–76.

Foxhall K (2000) What's behind that credential? When it comes to credentialing, *caveat emptor*. *Monitor on Psychology* September.

Goldstein AM (ed.) (2003) *Handbook of Psychology. Forensic Psychology*. vol. 11. New York: John Wiley.

Greenberg S, Shuman D (1997) Irreconcilable conflict between therapeutic and forensic roles. *Professional Psychology: Research and Practice* 28: 50–57.

Grisso T (2003) *Evaluating Competencies: Forensic Assessments and Instruments*, 2nd edn. New York: Kluwer Academic.

Grisso T, Steadman HJ (eds.) (1995) Special section of commemorative articles in memory of Saleem A. Shah. *Law and Human Behavior* 19(1): 1–48.

Hansen M (2000) Expertise to go. *American Bar Association Journal* 86: 44–52.

Heilbrun KS (2001) *Principles of Forensic Mental Health Assessment*. New York: Kluwer Academic.

Hess AK (1999) Defining forensic psychology. In: Hess AK, Weiner IB (eds.) *The Handbook of Forensic Psychology*, 2nd edn., pp. 24–47. New York: John Wiley.

Hess AK, Weiner IB (eds.) (1999) *Handbook of Forensic Psychology*. New York: John Wiley.

Kagehiro DK, Laufer WS (eds.) (1992) *Handbook of Psychology and Law*. New York: Springer-Verlag.

Kaslow FW (1989) Early history of the American Board of Forensic Psychology: a retrospective account. *Forensic Reports* 2: 305–311.

MacDonald E (1999) The making of an expert witness: it's in the credentials. *Wall Street Journal* February. 8, pp. B1.

Munsterberg H (1908) *On the Witness Stand: Essays on Psychology and Crime*. New York: McClure.

Parry J, Drogin EY (2000) *Criminal Law Handbook on Psychiatric and Psychological Evidence and Testimony*. Washington, DC: American Bar Association.

Parry J, Drogin EY (2001) *Civil Law Handbook on Psychiatric and Psychological Evidence and Testimony*. Washington, DC: American Bar Association.

Forensic Psychiatry, Education, Training and Certification

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Introduction

Over the past three decades, around the world, education, training, and certification in forensic psychiatry have grown more uniform and systematic. This is particularly true of the USA, which is the primary focus of this article. Education and certification in the UK and Canada are also summarized. Readers who wish to learn about education and certification in any other country are directed to contact that country's national psychiatric association or, if applicable, that country's national association for psychiatry and the law. Finally, an outline for systematic, independent training for those wishing to forgo a formal education in forensic psychiatry is presented.

USA

Education

In 1982, the American Academy of Psychiatry and the Law (AAPL) and the American Academy of Forensic Sciences (AAFS) cosponsored a report, *Standards for Fellowship Programs in Forensic Psychiatry*. The report promulgated common didactic and clinical curricula in training programs in the USA and Canada. In 1988, the creation of the Accreditation Council on Fellowships in Forensic Psychiatry (ACFFP), a component of the AAPL, established a process to recognize training programs that met the *Standards for Fellowship Programs in Forensic Psychiatry*. The ACFFP accredited fellowships from 1989 to 1997. Partway through 1997, the ACFFP was supplanted by the Accreditation Council for Graduate Medical Education (ACGME). The ACGME is the recognized accrediting body for all graduate medical education programs in the USA. As of the 2003–2004 academic year, the ACGME had approved 40 residency programs (with a total of 100 trainee positions) as meeting its criteria for accreditation in forensic psychiatry.

The ACGME requires that the training period in forensic psychiatry be 12 months for its approved programs, and that training occurs after completion of a psychiatry residency program accredited by the

ACGME. However, training in forensic psychiatry that occurs during the general residency training is not credited toward this 1-year requirement.

The clinical assignments must include experiences in the following three areas: (1) forensic evaluation of subjects of both genders – including adolescent, adult, and geriatric groups – who represent a broad range of mental disorders and circumstances, in both civil and criminal contexts; (2) consultation to general psychiatric services on issues related to the legal regulation of psychiatric practice such as civil commitment, confidentiality, refusal of treatment, decision-making competence; and (3) treatment of persons involved in the criminal justice system. Residents must have experience in review of written records, and in testifying in court or in mock trials.

The didactic curriculum must include the following components: (1) a psychiatric curriculum; (2) a law curriculum related to forensic psychiatry (e.g., fundamentals of law); (3) a civil law curriculum; (4) a criminal law curriculum; and (5) conferences in forensic psychiatry. The program should also offer a meaningful, individually supervised, scholarly experience for each resident.

The program must be administratively attached to and sponsored by a residency program in psychiatry that is accredited by the ACGME. The program should take place in facilities accredited by the appropriate state and/or federal licencing agencies, the courts, and, where appropriate, the Joint Commission on Accreditation of Healthcare Organizations. Assignments to participating institutions must be based on a clear educational rationale and include written affiliation agreements with clearly stated learning objectives and activities, and identification of faculty and their responsibilities.

The program must include experiences in: (1) facilities in which forensic psychiatric evaluations are performed on subjects with a broad variety of psychiatric disorders (e.g., an inpatient forensic unit); (2) facilities that provide general psychiatric services to patients with a broad variety of psychiatric disorders (e.g., a general outpatient unit); and (3) facilities that treat persons in the correctional system (e.g., a prison). Residents must have access to a major medical library with an adequate number of texts and journals in psychiatry and the law, and online access to medical and legal databases.

The program director must be certified by the American Board of Psychiatry and Neurology (ABPN) in the specialty of forensic psychiatry, or have equivalent qualifications in forensic psychiatry that are acceptable to the ACGME's Psychiatric Residency Review Committee (RRC). The program director organizes and manages the activities of the educational program in all institutions that participate in the program. The program director also prepares a statistical and narrative description of the program as requested by the RRC, and monitors the progress of each resident.

As with the program director, the physician faculty must be certified by the ABPN in the specialty of forensic psychiatry, or have equivalent qualifications in forensic psychiatry satisfactory to the RRC. There must be at least one ABPN-certified child and adolescent psychiatrist on the faculty. The faculty must be qualified by experience in forensic psychiatry to provide the expertise needed to fulfill the didactic, clinical, and research goals of the program, and must devote sufficient time to the educational program. In addition to the psychiatrists, the faculty must include a lawyer and a forensic psychologist.

These represent a partial list of ACGME's requirements. For the complete list, visit the ACGME website and look for "program requirements for residency education in forensic psychiatry."

The Association of Directors of Forensic Psychiatry Fellowships (ADFPF) also plays a role in the effort to ensure quality education in forensic psychiatry. The ADFPF, a council of AAPL, provides a venue for forensic residency directors to exchange ideas and remain up-to-date with developments relevant to training in forensic psychiatry. The ADFPF meets twice a year, at the annual AAPL meeting, and immediately prior to the annual American Psychiatric Association (APA) meeting.

Certification

The American Board of Forensic Psychiatry (ABFP), established in 1976, was an organization that required candidates for certification to take both a written and an oral examination to demonstrate competence. Successful completion of the ABFP examination conferred a lifetime certification in forensic psychiatry.

In 1990 the AAPL succeeded in obtaining, from the APA, formal recognition of forensic psychiatry as a psychiatric specialty. In the early 1990s, the APA petitioned the ABPN to establish an examination procedure for persons to be certified in the subspecialty of forensic psychiatry. (The ABPN at that time already offered a certifying examination in general, and in child and adolescent psychiatry.) The ABPN then successfully petitioned the American Board of Medical Specialties (ABMS) for authorization to offer a new forensic psychiatry examination. Thus, as of October 1994, the ABFP was supplanted by the examination for Added Qualifications in Forensic Psychiatry of the ABPN, under the supervision of the ABMS.

The ABPN's multiple-choice examination assesses candidates on their knowledge in: legal regulation

of psychiatry; civil law and criminal law; corrections and correctional healthcare; legal systems and basic law; children and families; special diagnostic and treatment issues; special procedures in forensic psychiatry; special consultations and investigations; risk management (including violence, dangerousness, criminology, suicide, and psychiatric autopsy); and forensic psychiatry practice issues.

In order to sit for the ABPN forensic exam, an applicant must first be certified by the ABPN in psychiatry. The examination of April 1999 was the last ABPN exam a psychiatrist could take without having graduated from a 1-year fellowship in forensic psychiatry. The examination of April 2001 was the last ABPN exam a psychiatrist could take without having graduated from an "ACGME-approved" residency. Thereafter, all applicants were required to submit documentation of successful completion of 1 year of ACGME-approved residency training in forensic psychiatry.

Unlike the lifelong certification of the ABFP, ABPN certificates for forensic psychiatrists are valid for only 10 years; periodic recertification examinations are required to sustain ABPN forensic certification. The ABPN does not offer a "grandfathering" mechanism; everyone certified by the ABPN must pass its exam. As of January 1, 2003, the ABPN had issued 1384 certificates in forensic psychiatry. Graduation from an ACGME-accredited forensic psychiatry residency and certification by the ABPN is now the preferred route to forensic psychiatry in the USA.

UK

Education

In the UK, the Royal College of Psychiatrists (RCPsych) accredits hospitals for training purposes, and offers a certification examination for psychiatrists who have completed specialist training (the equivalent of general psychiatry residency training in the USA). In specialist training, the RCPsych recognizes a placement (rotation, in the USA) in forensic psychiatry as an optional component of training. A placement in forensic psychiatry is subject to the requirements of all placements in basic specialist training, including a job description and timetable. Most placements are of 6 months duration. The RCPsych recommends that a placement in forensic psychiatry include consultations at prisons, hospitals, secure units, remand centers, and other establishments. Trainees are encouraged to prepare shadow reports for discussion with their consultants, and to receive instruction in the principles of forensic psychiatry and medical–legal work.

After completing basic specialist training, and passing the examination for membership of the Royal College of Psychiatrists (MRCPsych), a psychiatrist who wishes to specialize in forensic psychiatry may enter further specialist training. There are six areas of higher specialist training: (1) general (adult) psychiatry; (2) old-age psychiatry; (3) psychiatry of learning disability; (4) psychotherapy; (5) forensic psychiatry and (6) child and adolescent psychiatry. Over the past decade, major changes in the structure of specialist training in the UK have brought the training into accord with European Union medical directives. In July 1992, the UK established a committee under the chairmanship of the Chief Medical Officer, which included presidents of Royal Medical Colleges (including the RCPsych). This committee issued the Calman Report that led to the enactment of the European Specialist Medical Qualifications Order 1995 (ESMQO). This order created both the Specialist Training Authority (STA) and the award of Certificates of Completion of Specialist Training (CCSTs) as the single means of indicating completion of higher specialist training. Since January 1, 1997, all appointees to National Health Service (NHS) consultant posts must possess a CCST.

As a result of the above changes, the RCPsych and the Association of University Teachers of Psychiatry agreed at the end of 1997 that the erstwhile Joint Committee on Higher Psychiatric Training should become a College committee, to be known as the Higher Specialist Training Committee (HSTC), reporting to the Court of Electors. The HSTC has the dual role of setting the standards for training schemes (programs) in psychiatric specialties, and setting the standards (under the aegis of the STA) for the award of CCSTs. The HSTC accomplishes these goals by establishing a series of specialist advisory committees (SACs) reporting to it. Currently, there are five SACs, including a Forensic Psychiatry Specialist Advisory Committee (FPSAC), and these committees produce advisory papers on higher specialist training for the HSTC. The mandate of a SAC, including the FPSAC, is to: (1) assess higher specialist training schemes and report upon their organization and quality to the HSTC; (2) consider applications for approval of new training placements and trainers; (3) consider applications for specific approval of aspects of individual trainees' experience in relation to the requirements for training' in a specialty; and (4) advise the HSTC on policy and give guidance to training program directors and trainees.

The FPSAC meets four times a year at the Royal College. Throughout the year, the FPSAC conducts approval visits to specialist training schemes in forensic psychiatry throughout England, Wales, and Scotland. The FPSAC visiting teams make recommendations

based on the overall results of their visits, as well as on the particular needs of individual schemes.

The RCPsych's *Higher Specialist Training Handbook* gives an account of the aims of higher specialist training, basic training requirements, and the range of clinical experience required within forensic psychiatry. In order to be eligible for a CCST in forensic psychiatry, a psychiatrist must complete 3 years of higher training in forensic psychiatry. The duties of a British training-program director are multifarious and similar to those of a program director in the USA. Amendments to the *Higher Specialist Training Handbook* are published in the RCPsych's *Psychiatric Bulletin*.

Certification

A psychiatrist must pass parts I and II of the MRCPsych to enter higher specialist training. Part II of the MRCPsych contains questions on forensic psychiatry. Passing the MRCPsych of the RCPsych, certifies expertise in general psychiatry. Passing the MRCPsych may be likened to passing the ABPN certification examination in general psychiatry in the USA. In the spring of 2003, 42% and 49% of candidates passed parts I and II of the MRCPsych, respectively.

The UK does not offer a certification examination in forensic psychiatry. Rather, every trainee in forensic psychiatry is annually evaluated by the program director and the HSTC to determine whether the trainee is allowed to progress to the next year and, ultimately, to be awarded a CCST. The end of the first year of higher specialist training is particularly important as it is at this stage that reservations about the performance of a trainee are expected to be made clear.

Canada

Education

According to the Canadian Psychiatric Association (CPA), nine of Canada's 16 medical universities offer fellowships in forensic psychiatry. These fellowships take 1 or 2 years, depending on the program. The curriculum also varies from program to program. Entry into a fellowship requires, at a minimum, completion of 4 years of residency in general psychiatry (identical to the requirement for entry into a forensic residency in the USA). A few programs additionally require that the psychiatrist has passed the Royal College of Physicians and Surgeons of Canada (RCPSC) examination in psychiatry. This certifying examination serves a purpose similar to the ABPN examination in general psychiatry in the USA.

From 1989 to 1997, Canadian forensic psychiatry fellowships were accredited by the ACFFP, a component of AAPL. In 1997, the ACGME supplanted the ACFFP in the USA. The ACGME is not authorized to accredit Canadian postgraduate medical programs. The RCPSC is the body that today would otherwise accredit Canadian forensic psychiatry fellowships. However, the RCPSC does not recognize forensic psychiatry as a subspecialty, and therefore does not accredit forensic psychiatry fellowships.

With the goal of receiving subspecialty recognition of forensic psychiatry, the Canadian Academy of Psychiatry and the Law (CAPL), within the auspices of the Canadian Psychiatric Association, created an education committee. In 1996, this committee developed a model training curriculum with the aim of standardizing training across the country. In 1999, CAPL petitioned the RCPSC to recognize forensic psychiatry as a subspecialty. To date, the RCPSC has not granted such recognition (as it also has not recognized the subspecialty status of child psychiatry and geriatric psychiatry).

Certification

The RCPSC is the body that certifies the expertise of Canadian physicians in their various specialties and subspecialties. However, as the RCPSC does not recognize forensic psychiatry as a subspecialty, it offers no certification examination in that field.

Independent Training

The USA, the UK, and Canada have made gradual moves toward standardization and quality in education and certification in forensic psychiatry. Nonetheless, the demand for practitioners in forensic psychiatry in these countries makes it possible for individuals to work in forensic psychiatry without having completed a residency, and without having been certified by an accrediting body. Indeed, at the present time, most practicing forensic psychiatrists in these countries (and around the world, for that matter) are not graduates of accredited forensic psychiatry residency programs, and are not certified as to their expertise. They are mostly psychiatrists trained in general psychiatry who are employed in forensic settings. To the extent these general psychiatrists have trained themselves as forensic psychiatrists, they have availed themselves of a variety of forensic employments, have attended continuing medical education programs, and have completed readings in forensic psychiatry. If one wishes to train outside a forensic psychiatry residency or fellowship, and one is willing to abandon specialty certification in

forensic psychiatry, then a program of independent training may allow one to develop the requisite skills and knowledge of a competent forensic psychiatrist.

Independent training refers to a self-directed program of education and employment. It rises above mere on-the-job training in that it is systematic and comprehensive. Training will typically take place on a part-time basis, and will continue over many years. A psychiatrist interested in pursuing independent training in the USA can turn to the ACGME's *Program Requirements for Residency Education in Forensic Psychiatry*. Perusal of these standards will allow one to learn not only the likely structure and content of an independent training program, but also the knowledge and skills a practitioner in the subspecialty is expected to possess. In the UK, psychiatrists may turn to the RCP's *Higher Specialist Training Handbook* for similar information. Independent study will have: (1) a series of employments exposing one to the diversity of forensic psychiatric work; (2) a sequence of readings and continuing medical education courses in forensic psychiatry; and (3) a regular schedule of supervision from an experienced and certified forensic psychiatrist.

The series of employments will include work in criminal law, corrections, civil law, and domestic-relations law. The emphasis is on the series. No single employment will provide the necessary range of experiences. The readings and continuing medical education courses will address a similarly broad range of topics. In addition, the training psychiatrist needs to know basic law and the legal system's procedures, and the landmark legal cases in the field. Continuing medical education in forensic psychiatry is available through the programs presented at annual forensic conventions, such as those of AAPL, CAPL, and AAFS. Psychiatric organizations with broader missions, such as the RCP, the CPA, and the APA, also typically offer a small selection of forensic courses and panels at their annual conventions. Finally, the regional chapters of AAPL provide local educational opportunities.

Private instructions and supervision in forensic psychiatry are usually available on a fee-for-service basis. Instruction should include how to conduct a forensic psychiatric assessment, how to write a forensic psychiatric report, and how to testify effectively in court. Supervisors should be formally trained and certified in forensic psychiatry, and, preferably, be on the faculty of an accredited forensic residency or higher specialist training program. AAPL's membership directory offers a list of psychiatrists certified by the ABFP. The ABPN and ABMS offer a list of psychiatrists with ABPN certification.

Conclusion

A forensic psychiatry residency (and its equivalent in the UK and Canada) provides a more intense and systematic experience than independent training. Residency training ensures exposure to the field's diversity, with close supervision from experienced and certified practitioners. Nonetheless, for the next several decades at least, a mix of self-trained and residency-trained, certified and uncertified, forensic psychiatrists will practice the subspecialty in the USA, the UK, and Canada. Until the practice of forensic psychiatry is made legally contingent on graduation from an accredited forensic residency or certification by an accrediting body, some practitioners will continue to come into the field by independent, on-the-job training.

See Also

Accreditation: Forensic Specialties Accreditation Board; **History of Forensic Medicine**

Further Reading

American Academy of Forensic Sciences–American Academy of Psychiatry and the Law Joint Committee on Accreditation of Fellowship Programs in Forensic Psychiatry (1982) Standards for fellowship programs in forensic psychiatry. *American Academy of Psychiatry and the Law Bulletin* 10(4).

American Academy of Psychiatry and the Law, www.aapl.org.

American Board of Medical Specialties, www.abms.org.

American Board of Psychiatry and Neurology, www.abpn.com.

American Council for Graduate Medical Education, www.acgme.org.

American Psychiatric Association, www.psych.org.

Canadian Academy of Psychiatry and Law, www.caplnet.org.

Canadian Psychiatric Association, www.cpa-apc.org.

Reeves R, Rosner R (2003) Education and training in forensic psychiatry. In: Rosner R (ed.) *Principles and Practice of Forensic Psychiatry,* 2nd edn., pp. 52–55. London: Arnold.

Royal College of Physicians and Surgeons of Canada, rcpsc.medical.org/index.php3?pass = 1.

Royal College of Psychiatrists, www.rcpsych.ac.uk.

Assessment

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Introduction

In the approach to a problem in any field of knowledge, a conceptual framework or method allows one to organize and analyze data rationally. A useful framework for assessment in forensic psychiatry and forensic psychology is a four-step method, articulated by Richard Rosner. These steps are:

1. Issue: What is the specific psychiatric– or psychological–legal issue?
2. Legal criteria: What are the legal criteria that will be used to resolve the issue?
3. Data: What are the data relevant to the legal criteria that will be used to resolve the issue?
4. Reasoning: How may the data be applied to the legal criteria in order to establish a rational psychiatric or psychological opinion?

Issue

Psychiatric and psychological issues in forensic medicine arise in three broad areas of law: (1) civil law, (2) criminal law, and (3) legal regulation of mental healthcare. Civil law involves issues such as disability, personal injury, fitness for work, child custody, child abuse and neglect, parental competence and termination of parental rights, guardianship, and testamentary capacity. Criminal law involves voluntariness of confessions; juvenile delinquency; waiver to adult court; competence to stand trial, enter a plea, and testify; insanity; diminished capacity; and risk assessment. Legal regulation of mental healthcare includes issues such as voluntary hospitalization, involuntary hospitalization, right to treatment, right to refuse treatment, informed consent, malpractice, and ethics.

In a given case, there may be several potential psychiatric– or psychological–legal issues. The forensic psychiatrist or psychologist must identify the specific legal issue or issues that the referring judge, attorney, or agency wishes the evaluator to address. Such identification is not always easy. A busy judge or attorney may ask for a "psychiatric evaluation" of a defendant and provide no additional information. The evaluator bears the responsibility of contacting the referring person and ascertaining just what psychiatric–legal issue or issues the referrer wishes the evaluator to address. The completed forensic report may otherwise fail to meet the needs of the legal system.

A referrer may have only a fuzzy idea about which issue should be addressed by the psychiatrist or psychologist. Such confusion is not uncommon. The evaluator should clarify the issue. For example, an attorney involved in a child custody dispute might ask the psychologist to evaluate the opposing attorney's client for evidence of neglect of the child. The perspicacious psychologist might suggest that the attorney broaden the issue to an evaluation of which custody arrangement serves the interest of the child better.

A single case commonly involves more than one issue. For example, an attorney might wish to know whether his or her client's statement to police was voluntary. The attorney might also wish to know whether the client is competent to stand trial and whether the client was insane at the time of the offense. Each issue requires its own evaluation according to the legal criteria applicable in the given jurisdiction.

Criteria

For any given psychiatric– or psychological–legal issue, there are many legal arenas in which the issue may come into play. Most legal systems, including those of the USA and UK, are arranged hierarchically. The USA has its federal, military, and 50 state jurisdictions plus the District of Columbia. For each of these jurisdictions, there is a separate set of statutes (laws created by a legislature), case law (rulings made by judges), and administrative code (policies created by bureaucracies). (For the arrangement of jurisdictions within a given country, consult a basic law-school text for that country.) In addition, there are the small, private arenas such as the proprietary definition of disability in a disability insurance policy issued by an insurance company. For the purposes of a forensic evaluation, statutes, case law, administrative code, and private policy all function as "law" in that they serve as the legal criteria that define an issue.

These numerous jurisdictions and their subdivisions mean that the legal criteria defining an issue are numerous and diverse. The forensic evaluator must be certain of the legal criteria applicable to an issue within a given jurisdiction. Such knowledge requires, first, familiarity with the arrangement of the legal system within one's country. Second, an evaluator needs to develop a means to access the appropriate criteria. The easiest and most common means of access is for the evaluator simply to ask the referring attorney for a written statement of the appropriate legal criteria. The criteria should be written because an attorney's oral report is unreliable.

The criteria may be vague and are always open to interpretation, but they nonetheless roughly establish the boundaries of the issue. For example, in most jurisdictions in the USA, a legal criterion for competence to stand trial is some version of the capacity to consult with one's lawyer with a reasonable degree of rational understanding. What is "reasonable"? Reasonable people – including judges, attorneys, and forensic evaluators – can and do differ in their interpretation of this criterion. On the other hand, the criterion's requirement that a defendant demonstrate some ability to work with his or her lawyer establishes a higher threshold for competence than if the criterion were nonexistent.

If the attorney works infrequently with mental health issues, the attorney may be uncertain of the criteria. The evaluator should insist that the criteria be made available. Otherwise, one's opinion is logically unsupported. Because the legal criteria are numerous and recondite, the experienced evaluator not uncommonly educates the attorney. Subscriptions to legal publications (e.g., in the USA, *Westlaw* and *LexisNexis*) are an independent means for an evaluator to access the legal criteria. Do not rely on the internet for free access to these criteria. Internet searches in this area are slow, often fruitless, and always tedious.

Data

After identifying the psychiatric– or psychological–legal issue and the criteria defining the issue, the psychiatrist or psychologist gathers the data relevant to the criteria defining the issue. Unlike routine clinical practice, the data may concern more than the present mental state of the examinee. For example, the examinee's past mental state is relevant to the question of whether the examinee was insane at the time he or she committed a crime. An examinee's future mental state is relevant to the question of which parent is likely to be the better custodian of an infant.

Results of forensic assessments are not confidential in the way that medical and therapeutic records are (generally) confidential. A psychiatric or psychological forensic assessment, being requested by an attorney, judge, or agency, is read by these same entities. These entities then use the assessment to render a legal decision that might benefit or hurt the examinee. Therefore, before proceeding with a forensic assessment, a forensic examiner warns an examinee about the lack of confidentiality and the purpose of the assessment. The warning seeks to dispel any confusion the examinee might have that the assessment is for therapeutic purposes and will stay between the examiner and examinee. Such a warning is typically required by professional ethical guidelines.

Stakes are high in these evaluations because they typically involve matters of liberty, custody, or large amounts of money. The examinee often has good reason to exaggerate, distort, evade, or lie outright. Therefore, the forensic evaluator exercises a healthy skepticism of any claim made by an examinee. Looking deeply into the eyes of the examinee is rarely the means by which the examiner establishes truth. People lie often and well. Rather, scrutiny of the examinee's statements for contradictions, distortions, and evasions may provide evidence of dissembling. Simple but clever questioning techniques may also reveal evidence for malingering of mental illness. The examiner compares the mental state of the examinee to what the examiner knows about genuine psychopathology. Occasionally, the interview is all that is needed to dispose of a case. For example, an interview of a jail inmate may reveal that he is confused and disorganized, and unable to respond to questions, making it perfectly obvious that he does not meet the legal criteria for competence to stand trial. Thus, it is beneficial for the evaluator to be a good diagnostician and to maintain at least a parttime clinical practice.

In addition to the interview of the examinee, and unlike many therapeutic assessments, the forensic psychiatrist or psychologist seeks collateral information to confirm or refute the examinee's statements. Obviously, an examinee's story gains credibility if others consistently corroborate the story. The converse is also true. Typical sources of historical information include medical records, school records, vocational history, criminal history, police reports, and statements from relatives, employers, and caregivers. It is this fastidious, persistent, and unglamorous accumulation and evaluation of historical data that comprises the core of the psychiatric or psychological forensic assessment.

Normative tests, nonnormative structured assessments, and brain imaging are additional diagnostic tools. These types of tools are increasing in number, diversity, and precision, and they are gradually supplanting unsupported and untested individual opinion. Such change is welcome in a field that purports to offer science as the basis of opinion. Buttressed with normative testing, structured assessments, and brain imaging, one's opinion may be disputed in court but is unlikely to be dismissed altogether as being unreliable, invalid, and obscure in its reasoning.

The skill of the forensic psychiatrist or psychologist is revealed by the practitioner's knowledge of what test to use in what forensic situation. A normative test is a test in which the distribution of results is known

within a population. Such a test offers an established reliability and validity. For example, the second edition of the Hare Psychopathy Checklist – Revised (PCL-R) is an indispensable 20-item rating scale for assessing psychopathy, a personality construct characterized by remorselessness, irresponsibility, and crime. The PCL-R is normed on various forensic populations, including international forensic populations, and has established reliability and validity data. The Portland Digit Recognition Test is a normative test of feigned memory loss, in which the distribution of results within the population of head-trauma victims is known. A nonnormative structured assessment specifies the factors that are empirically associated with a suspected phenomenon, but leaves the weighting of the factors to the judgment of the evaluator. For example, the Structured Assessment of Violence Risk in Youth (SAVRY) lists the factors that are empirically predictive of future violence in adolescents. In the SAVRY, an examiner assesses an adolescent on each factor but then uses his or her own judgment to combine the factors and render a final opinion as to the adolescent's likelihood of committing future violence. A nonnormative structured assessment lacks the reliability and validity of a normative test. However, a nonnormative structured assessment remains useful because it is based on research, and it makes one's diagnostic method more explicit than in unexplained clinical opinion. Thus, one's opinion rises above the individualism and even idiosyncrasy that is tolerated in clinical practice. Brain imaging is advancing rapidly and may soon play a routine role in a forensic assessment. Today, however, the sensitivity and specificity of the various means of brain imaging in the diagnosis of psychopathology are largely unknown. Thus, the usefulness of brain imaging in forensic assessment is limited.

Reasoning

Armed with data relevant to the legal criteria, the psychiatrist or psychologist applies the data to the criteria in order to establish a rational psychiatric or psychological opinion. The reasoning process is often the most difficult part of the assessment because it requires logical thinking, and logical thinking is not a skill or talent that is distributed equally among persons. The structure of a psychiatric– or psychological–legal opinion should follow the three generic steps of a syllogism. The first step is the assertion of a premise. The second step is the assertion of a minor premise or fact. The third step is a deductive inference or conclusion that follows from the premise and fact. The following is an example: all dogs are animals (the premise); Fluffy is a dog (the fact); therefore, Fluffy is an animal (the conclusion).

In a psychiatric– or psychological–legal opinion, the premise is the legal criteria. The fact is the data relevant to the criteria. The conclusion is the final opinion. Consider the insanity defense. In the state of New Jersey, a person is not criminally responsible for conduct "if at the time of such conduct he was laboring under such a defect of reason, from disease of the mind as not to know the nature and quality of the act he was doing, or if he did know it, that he did not know what he was doing was wrong" (the premise). Mr. Jones, at the time he committed murder, suffered from schizophrenia ("disease of the mind"), which so impaired his reason that he thought that killing his victim would save humanity. Therefore, he did not know the "nature and quality" of his act (the fact). Thus, Mr. Jones is not criminally responsible for his killing (the conclusion).

Each step in a psychiatric– or psychological–legal opinion may be incorrect and, thus, is subject to challenge. That is, the legal criteria may be incorrect, the data may not relate to the criteria, or the final opinion may have little or no relation to the criteria and data. An example of this last mistake is an opinion that a person suffers from schizophrenia and substance abuse and is subject to disorganized and violent behavior when he/she is not taking his/her medication and is abusing substances. Such an opinion may be entirely true, but it does not answer the question of whether the person was legally insane at the time he/she committed a criminal act.

Skillful reasoning in a forensic assessment requires more than attention to the logic of a syllogism. The forensic practitioner should approach an assessment as if an intelligent and skeptical nonclinician were reading the report (which is usually the case with a judge or an attorney). One should explain that which, by virtue of one's experience, has become clinically obvious. Jargon is better avoided (unless it is subsequently explained) because it impresses few and enlightens none. What are givens in therapeutic practice should be questioned and substantiated in a forensic assessment. For example, clinicians as well as laypersons commonly think that mentally ill patients pose an increased risk of violence relative to persons who are not mentally ill. However, the MacArthur violence risk assessment study, the largest study of violence in civil psychiatric patients in the USA, questions this assumption. The MacArthur study found that there was no difference between the prevalence of violence by patients without symptoms of substance abuse and the prevalence of violence by others living in the same neighborhoods who were also without symptoms of substance abuse. Substance abuse increased the rate of violence in both the patient and the comparison groups, and a higher

portion of patients than of others in their neighborhoods reported substance abuse. Furthermore, among those who reported substance abuse, the prevalence of violence among patients was significantly higher than that among others in their neighborhoods. Thus, the MacArthur study suggests that the increased prevalence of violence among psychiatric patients is mediated by substance abuse rather than by mental illness alone. The forensic practitioner is obligated to recognize this distinction and convey this in the practitioner's report because it may have a bearing on a person's parole or release from a hospital.

A judicial outcome commonly differs from the recommendation offered in a forensic assessment. The psychiatrist or psychologist should anticipate that outcome and offer recommendations contingent on different rulings. Uncertainty should be acknowledged. Forensic psychiatry and psychology are, at best, primitive sciences. At their worst, they are about who can spin the best yarn. Acknowledgment of uncertainty is not a condemnation of one's skill or profession but, rather, a recognition that normative data are often unavailable to contribute to an assessment, and that prediction of behavior is fraught with error. Acknowledgment of uncertainty adds to one's credibility because it reflects honesty. It places one's opinion in perspective and allows a judge, jury, or other reviewer to weight the opinion accordingly.

Finally, an assessment invariably takes the form of a written report. Courtroom testimony, despite what television dramas suggest, is but a small part of forensic work. A well-written report may even obviate testimony. Thus, the ability to write logically and well is an indispensable skill for the forensic psychiatrist and psychologist. Following the convention of judicial opinion, the psychiatric– or psychological–legal opinion should be near the beginning of the report. Such placement also allows a busy judge or attorney to learn the upshot of the report without having to wade through the data. The following format is useful for most forensic reports:

- Identifying data – the name and birth date of the examinee, the date of the evaluation, the date of the report, and the name of the evaluator.
- Reason for referral – including the person or agency requesting the referral, the legal issue, and the legal criteria defining the issue.
- Opinion – stated in language meeting the legal standard for the issue at hand.
- Sources of information – including persons interviewed and documents reviewed, and dates of each.
- Warning of lack of confidentiality – a statement (typically required by professional ethical guidelines) warning the examinee of the purpose of the evaluation and who will see the report, and estimating the examinee's comprehension of the report.
- Relevant history – including the offense or incident that led to the referral (as described by the examinee and others), criminal history, psychiatric history, medical history, family history, and social and developmental history.
- Mental status examination – including appearance, attitude, movements, orientation, attention, memory, fund of knowledge, intelligence, speech, mood, range of emotional expression, perception, thought process, thought content, and insight into one's mental illness and/or circumstances precipitating the evaluation.
- Test results – the results of normative testing, structured assessments, brain imaging, etc.
- Diagnostic formulation – an organization of the previously mentioned data supporting a psychiatric or psychological diagnosis, if any, including an acknowledgment of the diagnostic system and criteria that are used.
- Forensic formulation – an organization of the previously mentioned data that applies the data to the legal criteria and issue and identifies the reasoning used to reach one's conclusion.

Rational organization and analysis in a forensic psychiatric or psychological report allows one to manage large amounts of complex data. Because forensic mental health issues rarely reach the level of scientific certainty that other areas of scientific inquiry do (e.g., as in DNA analysis), a common conceptual framework allows areas of uncertainty or disagreement to be highlighted and explained. A common framework also allows efficient communication among colleagues. Finally, rational organization and analysis are likely to make one's presentation more effective.

See Also

Forensic Psychiatry and Forensic Psychology: Ethics; Forensic Interviewing; Malingering

Further Reading

Melton GB, Petrila J, Poythress NG, Slobogin C (eds.) (1997) The nature and method of forensic assessment. In: *Psychological Evaluations for the Courts – A Handbook for Mental Health Professionals and Lawyers,* 2nd edn, pp. 41–63. New York: Guilford.

Melton GB, Petrila J, Poythress NG, Slobogin C (eds.) (1997) Consultation, report writing, and expert testimony. In: *Psychological Evaluations for the Courts – A Handbook for Mental Health Professionals and Lawyers*, 2nd edn, pp. 519–546. New York: Guilford.

Rosner R (ed.) (2003) A conceptual framework for forensic psychiatry. In: *Principles and Practice of Forensic Psychiatry*, 2nd edn, pp. 3–6. London: Arnold.

Silva JA, Weinstock R, Leong GB (2003) Forensic psychiatric report writing. In: Rosner R (ed.) *Principles and Practice of Forensic Psychiatry*, 2nd edn, pp. 31–36. London: Arnold.

Ethics

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Introduction

Psychiatrists and psychologists tread on foreign professional territory when they step into the legal arena, and the customary standards of conduct that clinicians use when making therapeutic decisions often seem inappropriate or inadequate for situations where a legal determination, rather than healing, is the goal. In treatment settings, mental health professionals need to maintain clinical objectivity, but doing so rarely conflicts with their primary role of improving patients' health and functioning. In adversarial legal proceedings, however, no doctor–patient relationship usually exists between the forensic clinician and the litigant, and the mental health expert's official role – providing reliable, impartial information to assist the court – often seems at odds with attorneys' partisan duty to advocate diligently for their side. Whereas treating clinicians usually have straightforward, concrete aims (e.g., helping individual patients) to guide their treatment decisions, the forensic expert's moral allegiance is to abstract principles, such as truthfulness, candor, scientific accuracy, and professional competence. Thus the moral questions that psychiatric and psychological experts face are distinct from, and more complex than, those that mental health clinicians come across in ordinary patient care.

This article describes several ethical issues that mental health experts encounter, with special emphasis on topics covered in guidelines promulgated by the American subspecialty organizations of forensic psychiatrists and psychologists. The article also summarizes the efforts of several authors to articulate the ethical framework within which forensic mental health professionals conduct evaluations and provide other services to the legal system.

Who is a Forensic Psychiatrist? A Forensic Psychologist?

Having noted that forensic mental health experts face unique ethical issues raises two threshold questions: (1) What activities constitute forensic psychiatry and psychology? (2) Insofar as published ethical guidelines exist, to whom do those guidelines apply?

The ethical guidelines of the American Academy of Psychiatry and the Law (AAPL) describe forensic psychiatry as a medical subspecialty that applies scientific and clinical psychiatric expertise to civil, criminal, and correctional issues, as well as legislative matters. Practitioners of forensic psychiatry should adhere to ethical principles that govern the entire profession of psychiatry, and the AAPL guidelines thus supplement guidelines promulgated by the American Psychiatric Association (APA) and the American Medical Association. AAPL does not handle ethical complaints about psychiatrists' behavior, but directs these toward the APA, its district branches, and/or state medical licencing boards.

Specialty Guidelines for Forensic Psychologists were developed by Division 41 of the American Psychological Association, but are not an "official statement" of this organization. The guidelines offer a model of practices to which psychological experts should aspire, and are intended to amplify standards expressed in the American Psychological Association's *Ethical Principles of Psychologists*. The *Specialty Guidelines* define as forensic psychologists those licenced psychologists who regularly function as experts in legal proceedings, who work in correctional and/or forensic mental health facilities, or who serve in agencies that adjudicate judicial or legal matters.

Specific Issues, Problems, and Areas of Practical Concern

Because the activities of forensic psychiatrists and psychologists are in many respects similar, the ethical guidelines for their subspecialties share much in common. Experts in both subspecialties are advised about the need for special cautions concerning the examination procedures, consent, confidentiality, maintaining objectivity, relationships with evaluees and retaining counsel, and fees. However, forensic psychologists express more concern and assume more responsibility concerning the potential misuse of their expertise than do their psychiatric colleagues.

Boundary Issues and Role Conflicts

Mental health professionals use the phrase "boundary issues" to designate potentially problematic behavior that can arise when clinicians act outside their proper role. Although the traditional, fiduciary relationship between doctor and patient usually does not apply in forensic practice, forensic clinicians are ideally expected to have no relationship with evaluees or retaining parties beyond that of being an examiner and potential witness. Having a business or romantic relationship with an evaluee, an evaluee's family member, or a retaining attorney is hardly conducive to impartial assessment and would certainly create the appearance of bias.

Mental health professionals also agree that, as a general rule, they should avoid serving as legal experts who would offer expert opinions concerning patients whom they are also treating. This position differs from that taken by many medical specialists, and attorneys sometimes have difficulty appreciating why psychiatrists and psychologists feel as they do. The clinical reasons reflect concern that serving as an expert might so alter a patient's relationship with the therapist as to compromise future treatment irrevocably. Also, treating therapists do not – and should not – approach the evaluation of their patients with the kind of skepticism required of forensic clinicians. Further, respect for patients' privacy usually demands that a treating therapist be very cautious about any contact with other persons who know the patient, whereas such "collateral contacts" are frequent and often necessary parts of forensic assessments.

It is acceptable for a treating clinician to serve as a fact witness concerning a patient, though this is not without potential therapeutic pitfalls. If a patient becomes involved in litigation and a need for expert testimony arises, a treating clinician should recommend that the patient be evaluated for that express purpose by an independent, nontreating clinician. A possible exception to this general rule involves psychiatrists and psychologists who testify about their own patients at civil commitment hearings or who provide court reports concerning the status of defendants found incompetent to stand trial. In these circumstances, reports or expert testimony by a treating clinician may be required by statute or may be the only practical way of letting a patient get needed services. Nonetheless, before accepting a forensic role, a treating clinician should consider whether providing courtroom expertise would compromise his/her patient's care and whether the previous treatment relationship would preclude the clinician's functioning with the impartiality required of an expert witness.

Establishing and Clarifying the Expert's Role

The forensic expert's need to be honest and objective often conflicts with the desires of litigants and their attorneys to "win" cases. Because of this, forensic clinicians must clearly establish their role as evaluators and impartial experts when they accept referrals, and often must restate this role throughout the course of a consultation.

Relationships with referring attorneys Forensic consultations often begin with a telephone call from an attorney who seeks mental health expertise. When gathering information about the potential referral, the potential expert must explore several ethical matters before agreeing to be retained. These include ruling out conflicts of interest (created, for example, by having treated or had other previous contacts with the litigant). The expert must also decide whether his/her professional background and time constraints will permit him/her to do a proper job in conducting evaluations, reaching conclusions, and preparing for trial. The expert must clarify whether his/her expected role will be that of an impartial evaluator and potential courtroom expert, or a consultant who will help the attorney prepare the case but not testify. Experts should also apprise the referral source about articles they have written and any "skeletons in the closet" that might be relevant to the issues presented in the case.

If none of the just-mentioned considerations preclude accepting the referral, the expert should then discuss fees and payment arrangements. Though remuneration for services may seem like a practical rather than ethical matter, forensic referrals are fraught with potential situations in which concern about payment may influence (or at least appear to influence) the expert's opinion. For example, plaintiffs' attorneys regularly accept contingency fees, but mental health experts should not agree to such payment arrangements, which could detract from the expert's impartiality and objectivity. Retainer fees and other arrangements for advance payment reduce the temptation to alter one's opinion for financial reasons, and are therefore both ethically acceptable and often recommended.

Pressures to identify and "side with" referring attorneys can be explicit or implicit, blunt or subtle, external or internal. Some attorneys start initial discussions with a potential expert by saying, "I need a doctor to testify that…" Other attorneys insinuate that future referrals hinge on the expert's opinion about the current case. Attorneys may encourage experts to rephrase or revise their conclusions to fit their clients' legal positions better. In responding to

such overtures, experts must guard against losing objectivity or altering findings out of a desire to please or to be helpful. A more difficult (but crucial) duty is for the expert to recognize when unconscious identification with the retaining side may have unintentionally influenced the expert's views.

Relationships with evaluees A clinician should not undertake a forensic evaluation without receiving appropriate legal authorization, usually from the evaluee's attorney or through a court order. In a situation where consent is not legally required (e.g., a court-ordered evaluation concerning competence or civil commitment), the evaluator should still seek the evaluee's assent and should explain that refusal to participate will be noted in the evaluator's report and/or testimony. When consent is legally necessary and an evaluee cannot give valid consent, the evaluator should not proceed until substituted consent for the evaluation (in accordance with laws of the jurisdiction) has been obtained.

Even when evaluees are competent and have received clear explanations from their attorneys about a pending forensic examination, they may still regard evaluators as their "doctors" and think that the usual features of clinician–patient relationships apply. For this reason, a forensic interview should begin with a clear, simply worded statement of why the evaluation is occurring and what it will involve. Here, for example, is an explanation (using colloquial US English at a 12-year-old reading level) that might precede a court-ordered examination concerning criminal responsibility (i.e., insanity):

> I'm Dr. Smith, and I'm a psychiatrist. The court has asked me to evaluate your mental condition at the time of the crime you are charged with. I need to learn whether you had a mental disorder that was so serious that the court should not hold you criminally responsible.
>
> Although I am a doctor, I am not your doctor. Usually, when you see a doctor, the doctor treats you and doesn't tell anyone what you said. But here, my job is to evaluate you, learn the truth, and report my findings. I won't be treating you, and what I find out may or may not help your case. Also, what we talk about is not confidential. I'll send a report about our interview to the judge, your lawyer, and the prosecutor in your case. Later on, I may testify in court about what you've told me.
>
> It's important that you be honest with me. I'm going to ask about many things, but you don't have to answer all my questions. If you choose not to answer some questions, however, I may need to say that you didn't in my report. The county will pay me for my time, so I won't be billing you. If you need to take short breaks while we're talking, that's fine – just ask me.
>
> Do you have any questions about what I just said? Do I have your permission to continue?

To make sure that evaluees have understood, some examiners will have the evaluees restate what they have been told about the interview's nature, purpose, and nonconfidentiality. Doing this tells the evaluator how well an evaluee has understood matters, which is relevant to ensuring the evaluee's competence to undergo evaluation. The exchange also establishes the nontherapeutic posture of the evaluation, puts the evaluee on notice about the examiner's impartial role, affirms the evaluee's autonomy, and warns the evaluee about potential consequences.

Despite issuing such cautions, forensic evaluators must remain alert to the possibility that, in an evaluee's mind, an examination may become a therapeutic encounter. When evaluators sense this occurring, they should remind evaluees of the evaluator's neutral, nontreatment role.

Confidentiality As the above section explains, forensic evaluations do not take place in a climate of confidentiality, and evaluees must be told how information will be released. Beyond this, however, forensic clinicians should protect evaluees' privacy to the extent that the legal context permits. Before the trial, an expert should not discuss a case with an opposing expert or counsel without first getting the retaining attorney's permission. Although the media sometimes obtain copies of forensic evaluators' reports, it is improper for mental health experts themselves to furnish reports to news organizations.

Personal examination Published ethical guidelines recommend that mental health experts only offer opinions about individuals who have been personally examined. In cases where an expert cannot conduct a personal examination of an individual, it is acceptable to formulate and offer an opinion about that individual based on other available information. Experts should make it clear when they are doing this, however, and should explain how this limitation may affect the accuracy and reliability of their opinion.

Test security, "raw" data, and legal requirements The usefulness of many psychological tests (including intelligence scales and personality inventories) depends in part on the public's lacking access to the tests' precise contents. For example, if questions from the Wechsler intelligence scales were easily obtained and evaluees could study them, the test results would no longer be valid indicators of evaluees' native intelligence. For this reason, the American Psychological Association's *Ethical Guidelines* admonish psychologists to maintain test security, i.e., to prevent persons who would not be authorized to administer tests

from obtaining questions, manuals, and other test materials. Similarly, psychologists may (and often should) refrain from releasing "raw" test data (e.g., an evaluee's responses) when doing so poses a risk that such data might be misrepresented or misused. Although psychiatrists' ethical guidelines do not explicitly mention these matters, psychiatrists who use tests should observe similar precautions.

During litigation, a mental health expert may be subpoenaed or statutorily required to submit to opposing counsel "all" documents related to a case, which could include raw data and test information printed on scoring forms. Often, however, the expert can satisfy such requirements by asking opposing counsel to designate a licenced psychologist or psychiatrist who can receive the materials directly. This practice preserves test integrity and avoids the risk of misinterpretation by nonmental health professionals, while respecting opposing counsel's need independently to review potential sources of evidence in a case. An expert can respond to a subpoena by filing a motion for a protective order or for quashing the subpoena; the expert might also contact the test publisher, who may intervene with a similar motion to protect "proprietary" materials. If, despite such efforts, a court insists that an expert submit test materials to a nonclinician, the expert may have to obey the court's order.

Misuse of expertise Forensic psychiatrists and psychologists recognize that attorneys and legal decision-makers may distort or misuse their findings and opinions. Though psychiatrists find this dismaying, they ascribe such occurrences to the nature of the adversarial process, and feel their ethical obligations are satisfied so long as they remain honest and objective. The forensic psychology guidelines, however, see experts as being further obligated to ensure that their reports and testimony are used responsibly and to communicate findings understandably; to do this, experts should take into account the characteristics of the potential audience for their opinions and communications. American Psychological Association guidelines urge all psychologists to rely on established scientific principles and professional knowledge, to keep up-to-date on knowledge of scientific and professional developments, and to use that knowledge when collecting data and selecting evaluation procedures.

Theoretical Concerns

The duties and expectations of mental health experts seem at odds with the moral obligations that usually govern interactions between clinicians and those whom they evaluate. As physicians, psychiatrists regard their professional behavior as bound by Hippocratic obligations to heal the sick, alleviate suffering, and *primum non nocere* ("above all, do no harm"). The *Ethical Principles for Psychologists* lists benefiting and not harming clients and evaluees as the first of several general principles toward which psychologists should aspire, adding that considerations of fairness and justice entitle everyone to the benefits of psychology as a scientific and professional discipline.

Yet legal decisions rarely benefit all parties involved: in criminal cases, a conviction may imply fines, incarceration, or (in the USA) death; in civil cases, losing parties experience financial (and not infrequently, emotional) consequences. Recognizing that litigants whom forensic psychiatrists and psychologists examine often end up being adversely affected by the experts' reports or testimony, several commentators have asked whether and how professional ethics can be reconciled with the legal outcomes that mental health expertise often helps produce.

Avoiding the Courtroom

Some prominent US psychiatrists, including Karl Menninger and Alan Stone, believe that medical ethics and the demands of the legal system are incompatible, and have urged psychiatrists to stay out of courtrooms. Psychiatry, Stone writes, is an error-prone profession, but one that physicians nonetheless practice ethically when their intention is to ease patients' suffering. Without this goal to guide them, psychiatrists lack a moral compass. In court, their knowledge and status may be misused, and they are prone to letting the adversarial legal system sway their views and undermine their integrity. Zealous legal advocacy, Stone writes, combined with the expert's financial interests and emotional responses, encourages experts to adopt polarized, extreme opinions. Some well-meaning clinicians assume antiprosecutorial biases in misguided efforts to help defendants; inexperienced experts often appear to be biased by personal issues that litigation symbolizes for them. Forensic examinations are often ambiguous encounters, Stone believes, during which skillful, empathic interviewers unavoidably create quasitherapeutic relationships that seduce evaluees into revealing information adverse to their cases. Though psychiatrists may think that giving honest testimony only furthers justice, doing so nonetheless violates the doctor's traditional obligation to help individual patients.

The Defense Psychiatrist

A second solution is explicitly to aim only to help evaluees, by, for example, testifying only in ways that might help the evaluee escape punishment.

Bernard Diamond believed that impartiality and objectivity were impossible aims, and felt a physician should not use his/her skills to enable prosecution and punishment. He therefore held that psychiatrists should testify only for the defense in criminal cases, and believed this position was consonant with a physician's therapeutic role. In this vein, some mental health professionals avoid certain kinds of evaluations (e.g., capital sentencing evaluations) because doing so might risk uncovering information that would adversely affect the defendant.

Appelbaum's Theory

As Paul Appelbaum has pointed out, if mental health professionals were obligated only to help those whom they examine, the legal system would have little use for their findings and opinions. It is only because accurate evaluations may be adverse to evaluees' interests that the legal system gives forensic testimony any credence. For this reason, Appelbaum believes that forensic subspecialists need ethical principles that are distinct from those of treating clinicians. Because forensic evaluators do not have treatment relationships with their evaluees and do not seek to promote their health, the ethical principles that apply in forensic contexts must differ from those that apply in treatment contexts, and should reflect the goals that society seeks to achieve by having mental health professionals participate in legal proceedings.

Society values courtroom psychiatric input because of its potential to advance the cause of justice, and such input is only valuable if it is truthful. Thus, truth-telling must be the first ethical principle in forensic psychiatry, according to Appelbaum. The legal system's search for truth is always tempered by respect for persons, even those who are suspected of committing crimes. Respect for persons thus is a second principle of forensic ethics, manifested in examiners' clarifying their role with evaluees, explaining the limits of confidentiality, and stating clearly that they are not providing treatment. Beneficence and nonmaleficence are aspects of forensic ethics only insofar as these principles obligate experts always to consider whether their actions are consonant with the aim of seeking justice.

Critiques of Appelbaum's Approach

Although Appelbaum's formulation is widely respected among forensic clinicians, his theory is not without critics. Ezra Griffith faults Appelbaum for not recognizing how historical experience and political disparities – for example, disparities between whites and blacks in the USA – affect what members of dominant and nondominant groups perceive as the "truth" about a situation. Full accounts of forensically relevant events, says Griffith, should include cultural formulations. Such formulations, which describe the evaluee's individual perspective and cultural factors that affect his/her illness and social functioning, would promote understanding of the evaluee, his/her personal experience, and his/her psychosocial environment. Expanding upon Griffith's insights, Candilis and colleagues argue that in many forensic consultations, a clinician's professional integrity entails moral responsibilities that go beyond a strictly evaluative role. Such responsibilities may require therapeutic efforts to make sure the problems that generate referrals are resolved in ways that address the legitimate needs of the persons involved.

Mossman asserts that mental health professionals do not and cannot abandon their obligations of beneficence and nonmaleficence when they serve as forensic experts, because these obligations apply to all citizens at all times. Relying on Kant's political theory, Mossman believes that all individuals have given their hypothetical rational consent to the requirements of a reasonably fair criminal justice system, including the requirement that individuals experience consequences (e.g., criminal penalties or civil sanctions) for undesirable acts. No interest is more important to a person than respect for his/her humanity, and truthful psychiatric input into legal determinations helps ensure that the rationality and humanity of the litigant are respected. Mental health professionals therefore fulfill their duties to help and avoid harming evaluees by conducting honest and objective forensic evaluations and by testifying honestly, even when the information so obtained or imparted supports criminal convictions or civil sanctions.

Integrity versus Advocacy

Shuman and Greenberg note an apparent tension created by psychologists' ethical obligation to be impartial sources of information for courts, and the partisanship of retaining attorneys who advocate zealously for their clients. Even when courts permit testimony that is biased or unfounded, experts may be subject to civil suits or sanctions by licencing boards if they become partisan advocates for litigants. However, Shuman and Greenberg believe that opposing integrity and advocacy represents a false dichotomy for psychological experts. Instead, they regard remaining impartial as the best form of advocacy: an expert must be credible to be an effective advocate for his/her viewpoint; to be credible, the expert must remain impartial and objective.

Mental health experts must simultaneously accommodate the evidentiary requirements of courts, the ethical requirements of their professions and licencing

boards, and implicit or explicit economic pressures to please retaining attorneys. Shuman and Greenberg believe experts can respond through adherence to five principles:

1. Experts should know the limits of current scientific knowledge and should not testify beyond those areas where psychological expertise permits adequate certainty.
2. Experts should disclose all information relevant to their opinions, though they have no obligation to disclose other information that would not bear on issues about which they have not been asked.
3. In formulating opinions, experts must evaluate issues from the perspective of all competing parties in litigation, request legal documents that describe competing views of a case, and identify evidence that would support or refute those views.
4. Experts should consider all perspectives and weigh rival hypotheses even-handedly.
5. Experts should present their findings candidly, even if attorneys feel that doing so conflicts with the allegiance the expert owes to retaining counsel.

Conclusion

This article only introduces some of the ethical issues that confront forensic psychiatrists and psychologists, and is intended to convey the complexity and variety of the ever-changing moral problems these subspecialists encounter. As of this writing, American forensic psychiatrists and psychologists are revising their published ethical guidelines. Mental health professionals are becoming increasingly aware of how their functioning as experts creates possible role conflicts and problems of double agency. They are also recognizing that their expertise concerning sex offenders and predicting violence may be inadvertently misapplied in legal proceedings. Finally, forensic psychiatrists and psychologists know that future social developments and court decisions – such as recent US rulings about restoring competence to stand trial and the execution of prisoners with mental retardation – will create new moral quandaries and require further revisions of ethical standards.

See Also

Expert Witness: Qualifications, Testimony and Malpractice; Medical; Daubert and Beyond

Further Reading

American Academy of Psychiatry and the Law (1995) *Ethical Guidelines for the Practice of Forensic Psychiatry.* Available at http://www.emory.edu/AAPL/ethics.htm (accessed December 5, 2003).

American Psychological Association (2002) *Ethical Principles of Psychologists and Code of Conduct.* Washington, DC: American Psychological Association. Available at http://www.apa.org/ethics/code2002.html (accessed December 5, 2003).

Appelbaum PS (1997) A theory of ethics for forensic psychiatry. *Journal of the American Academy of Psychiatry and the Law* 25: 233–247.

Candilis PJ, Martinez R, Dording C (2001) Principles and narrative in forensic psychiatry: toward a robust view of professional role. *Journal of the American Academy of Psychiatry and the Law* 29: 167–173.

Committee on Ethical Guidelines for Forensic Psychologists (1991) Specialty guidelines for forensic psychologists. *Law and Human Behavior* 15: 655–665.

Diamond BL (1992) The forensic psychiatrist: consultant v. activist in legal doctrine. *Bulletin of the American Academy of Psychiatry and the Law* 20: 119–132.

Griffith EEH (1998) Ethics in forensic psychiatry: a cultural response to Stone and Appelbaum. *Journal of the American Academy of Psychiatry and the Law* 26: 171–184.

Mossman D (1994) Is forensic testimony fundamentally immoral? *International Journal of Law and Psychiatry* 17: 347–368.

Rosner R, Weinstock R (eds.) (1990) *Ethical Practice in Psychiatry and the Law.* New York: Plenum.

Shuman DW, Greenberg SA (2003) The expert witness, the adversary system, and the voice of reason: reconciling impartiality with advocacy. *Professional Psychology: Research and Practice* 34: 219–224.

Stone AA (1984) *Law, Psychiatry, and Morality.* Washington, DC: American Psychiatric Press.

Stone AA (1994) Revisiting the parable: truth without consequences. *International Journal of Law and Psychiatry* 17: 79–97.

Strasburger LH, Gutheil TG, Brodsky A (1997) On wearing two hats: role conflict in serving as both psychotherapist and expert witness. *American Journal of Psychiatry* 154: 448–456.

Weinstock R, Leong GB, Silva JA (2003) Ethical guidelines. In: Rosner R (ed.) *Principles and Practice of Forensic Psychiatry,* 2nd edn, pp. 56–72. London: Edward Arnold.

Wettstein RM (2002) Ethics and forensic psychiatry. *Psychiatric Clinics of North America* 25: 623–633.

Psychological Autopsy

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Edwin Shneidman, Norman Farberow, and Robert Litman, then the directors of the Los Angeles Suicide Prevention Center (LASPC), coined the term "psychological autopsy" in 1958. Working in collaboration with the Los Angeles County Medical Examiner's

Office (under the direction of Theodore Curphey), these clinician-researchers devised procedures to assist the medical examiner in medicolegal investigations of equivocal deaths. Equivocal deaths are those that are not immediately descriptive of the manner of death because, for example, they were not witnessed or involved conflicting data. Through these procedures, the medical examiner hoped to make informed judgments and determine the manner of death more accurately.

The first recorded case in which these procedures were used involved a 46-year-old male who drowned off the pier at Santa Monica, CA. The case was equivocal because it involved contradictory eyewitness testimonies as to whether the man had stood in front of the guard rail and then jumped. Dr. Litman visited the site and interviewed both the witnesses and the decedent's relatives. He concluded that the decedent had been in good spirits and showed no signs of depression. On the day of his death, the decedent and another man were drinking heavily outside a bar on the pier. The decedent appeared to witnesses to have fallen asleep and was seen to slip off the bench on which he had been sitting and through the guard rail into the ocean, where he drowned. The death was ruled accidental. Over the next two decades, behavioral scientists from the LASPC investigated and consulted on more than 1000 cases referred by the county medical examiner's office.

The psychological autopsy involves the systematic collection of psychological data through structured interviews of the decedent's family members, friends, coworkers, and fellow students. Data are sought that are relevant to the decedent's characteristic behavior, personality, coping style, cognitive processes, psychiatric history, and general emotional life so that a rich psychological biography emerges. When combined with first-person accounts of the decedent's last days of life – evidence from the site of death; police investigation reports; and archival documents, e.g., medical and mental health records, school and occupational records, criminal records, and financial records – conclusions can be drawn as to the intention of the decedent, therefore the decedent's role in effecting his/her own death. Thus, the simplest definition of a psychological autopsy is:

> a set of postmortem investigative procedures that help ascertain and evaluate the role that physical and psychological factors play in the death of an individual, thus to determine the manner of death to as high a degree of certainty as possible.

Over the years psychological autopsies have been conducted for a variety of purposes. In the research on suicide they have served to develop detailed understandings of suicidal risk factors, e.g., from case-control studies of suicides versus matched nonsuicidal controls, and suicidal pathways. They are used in clinical work to help survivors of suicide better answer the nagging question "why?" when grieving the loss of a loved one to suicide, thus to help survivors in their grieving process. They have been used in governmental inquiries into major public suicides in the UK (cf., the Hutton Inquiry into the death of biological weapons inspector David Kelly in July 2003) and in the USA (cf., the Office of Independent Counsel's 1996 inquiry into the death of Vincent Foster, Jr., deputy counsel to President Bill Clinton).

Given its birth in the world of forensic pathology, it is no surprise that the psychological autopsy has found its way into the courtroom. The determination and certification of manner of death by the coroner or medical examiner is an opinion. As psychological autopsies are time-consuming, and therefore costly, very few coroner's offices have and can afford the budget to employ consultant-suicidologists to provide this expertise and investigative work necessary to conduct a psychological autopsy routinely on difficult, equivocal cases. If a litigant has reason to challenge the opinion of a coroner or medical examiner, it would ultimately be in the courtroom (or during discovery), where alternative opinions are presented and argued, that such a challenge would take place. Final decisions regarding such contested determinations, assigning responsibility for a death and, if applicable, penalties for that liability, are the province of the court.

The psychological autopsy is most commonly introduced in two broad types of forensic cases, those involving *parens patriae*, or custodial caretaking, and those of contested life insurance claims. In some instances, these issues are joined in the same case. In addition, psychological autopsies have been introduced in criminal cases.

Parens Patriae

Societies typically assign blame for every death, either to God (natural and accidental) or to humans (homicide and suicide). Where death can be attributed to human negligence, punishments are called for.

The office of the coroner was established, by ordinance, in England in 1194. The coroner was named guardian of the pleas of the crown with a primary responsibility to ensure the Royal Treasury of its revenues. Convicted felons, for example, forfeited their property to the crown, in addition to other punishments, not the least of which was hanging! It was up to the coroner to determine both what

Table 1 Types of forensic case in which the psychological autopsy is used

- Malpractice
- Institutional care
- Product manufacturers
- Worker's compensation
- Life insurance claims
- Criminal defense

constituted the felon's goods and chattels and how much they were worth. One who completed suicide was considered a *felo de se*, a felon against self, and, like the perpetrator of homicide, suffered forfeiture of property. (This penalty remained in effect until its abolition in 1870.) Moreover, those whose deaths were judged to be suicides were further punished through degradation of the corpse and burial outside consecrated ground.

Modern legal thinking has shifted from blaming the suicide to more enlightened attitudes of vulnerability (case-control psychological autopsy studies affirm that more than 90% of those who complete suicide have one or more mental disorders) and more compassionate concern for survivors. Responsibility, instead, is conferred on those in custodial and caretaking roles of protecting the potential suicide from conditions of predisposing self-harm or from actual self-harm behavior. Where these caretakers can be shown to have deviated from a duty of care, negligence may be found.

There are any number of potentially negligent caretakers and, consequently, targets of tort actions that fall under this rubric. Table 1 lists the major types of these cases and the following case examples illustrate each.

Malpractice

Negligence law allows plaintiffs to recover damages where it can be shown that a caregiver, e.g., mental health clinician, breached the standard of care to a patient and that breach (an act of omission or commission) can be shown to be a proximate cause of the suicide of a patient in the care of that clinician.

Case Illustration

A 37-year-old male was hospitalized briefly for a suicide attempt. One month later his behavior became erratic and threatening. After his wife moved out and threatened divorce, he drank heavily, wrote a suicide note, and ingested a large quantity of over-the-counter sleeping pills. Observed by neighbors rolling around in the gravel in front of his house, he was transported by rescue personnel to a local hospital where his stomach was pumped; he was then admitted against his will to a psychiatric unit. At intake he was evaluated as both homicidal and suicidal. A psychological evaluation assessed him as impulsive but unlikely to be suicidal in the future. After 6 weeks of hospitalization he was discharged with a week's supply of lithium carbonate and an outpatient referral "as needed." Hospital records indicated that at discharge his lithium was below therapeutic levels in his blood. He neither made an outpatient appointment nor refilled his prescribed medication. Two weeks after discharge he assaulted his wife with a hammer, hitting her several times on the head, and tried to strangle her. He then killed himself with a shotgun blast to the chest with a gun he had bought the previous day.

The inpatient facility was sued for improper assessment of suicide risk, improper discharge, inadequate attention to his continuity of care, and a host of other alleged breaches of the standard of care.

Institutional Care

Jails and prisons have custodial responsibilities for those sentenced to and housed by them. With regard to suicide risk, these institutions have responsibility to assess that risk and take preventive precautions against suicide. When a notably agitated and depressed inmate is either not noticed and evaluated and placed in position to be monitored, or transferred for mental health care, and a suicide results, the institution may be sued by the inmate's estate.

Product Manufacturer's Liability

Those who produce products for human use have a responsibility to ensure the safety of that product and its user. Since the publication of anecdotal reports of suicides related to selective serotonin reuptake inhibitors (SSRIs) and the subsequent governmental investigations into the safety of these medications, particularly with children and adolescents in both the UK and the USA, suits alleging that these medications have caused suicides among those who have taken them have proliferated. Because those who were prescribed these medications were depressed and possibly suicidal before and, indeed, that this was the reason for them taking these medications, there is a need for intensive investigation to help the court determine causation. Similarly, those who provide services attendant to a product have equal responsibility to ensure that those services are performed in a safe manner.

Workers' Compensation

Similarly, employers have a responsibility to provide safe working conditions. Workers' compensation laws in the USA provide for the care and support of employees injured on the job. Unsafe job conditions that lead to injuries which, in turn, produce mental distress and subsequent suicide can be shown to be proximate causes of that suicide. Psychological autopsies have been used, and allowed into court, to help determine pathways to suicide, thus proximate causation.

Case Illustration

A lifelong employee of the railroad injured his back when attempting to pick up a greasy steel coupling. Months of unremitting pain ensued. Unable to resume the work he loved, the engineer became despondent and soon resumed an earlier habit of alcohol abuse. With no hope of ever being able to return to work, he shot himself in the head during a night of binge drinking. His wife sued the railroad for not ensuring safe working conditions, specifying federal regulations requiring no greasy couplings at a job site.

Life Insurance Cases

Life insurance companies make actuarial bets. As suicide is viewed as an intentional act, an applicant for insurance who may see more value to his/her family in death than in life might take out a life insurance policy with intent to defraud, then complete suicide. To hedge that bet, life insurance contracts typically include a clause that denies payment of benefits if a suicide occurs within 2 years of the date a policy goes into effect. If denied benefits, the insured's beneficiaries may take the insurance company to court to recover denied benefits. As an affirmative defense, the burden of proof rests with the insurance company to prove that the death was a suicide. In the USA, the majority of states have some sort of presumption of law against suicide when the manner of death is equivocal. As the medical examiner or coroner's certification of death is based on opinion, it is not considered legal proof of how a person died. Thus, an opinion regarding the state of mind of the decedent derived from a psychological autopsy and reliant on operational criteria for classifying suicide has equal weight in court.

Case Illustration

The decedent was found in the closed trunk of a burning car; the body was bound at the ankles and thighs and had jumper cables tightly wrapped twice around his neck. The medical examiner initially determined the cause of death to be strangulation by ligature and the manner of death as homicide. However, as no evidence of trauma to the hyoid bone was found, as would have been expected if sufficient force to cause strangulation were used, the cause of death was amended on the death certificate to strangulation with diffuse thermal burns as a contributing cause; the manner of death was changed to undetermined.

Because life insurance in the amount of US$700 000 was placed less than 2 months before his death and because the decedent had allegedly misrepresented his income on his application, the insurance company denied his widow the insurance policy's benefits.

An independent forensic pathologist opined that the decedent was alive at the time the fire started, that his arms and hands were not bound, and that matches found under his body in the trunk of the car were used to start the fire and disguise his death as a homicide.

Early on the day of his death the decedent told his wife he had a business meeting with some Syrian businessmen with whom he was working on a "million-dollar deal – a deal of a lifetime." He further said to her that he had been suspicious of the source of their money and planned to confront them at this meeting.

A psychological autopsy requested by the insurance company found:

- The decedent had been under severe financial duress, and owed more than $100 000 to his credit card company.
- His marriage was in difficulty. The couple had vacationed separately, slept in separate beds, and did not socialize together.
- He was reported to have been drinking heavily.
- Although generally secretive by nature, in the days before his death he had specifically and uncharacteristically mentioned the name of the alleged Syrian company as his new client. No record of this named company could be found.
- There was no evidence of defensive wounds to the hands, as would have been expected had he been attacked; his vehicle was parked so as to invite discovery.

The psychological autopsy concluded that his death was a suicide and that the primary motive was shame over his inability to support his family financially.

Criminal Cases

In criminal cases psychological autopsies have been admitted in US courts to help juries decide whether

a parent should be held responsible for the suicide of a child (*Jackson* v. *State*, 553 So.2d 719 (Fla.App. 4 Dist. 1989)) and whether a decedent died by her own hand or at the hand of her husband (*State* v. *Guthrie*, 627 N.W.2d 401, 2001 SD 61 (S.D. 2001)).

Case Illustration

In the Guthrie case, the wife of a Presbyterian minister was found naked and unconscious in her bathtub. Efforts to resuscitate her failed and she died, never recovering any brain function. At autopsy, gastric and blood serum toxicology confirmed the presence of subtherapeutic levels of two antianxiety agents and a toxic and debilitating level of temazepam, but not a fatal overdose. The forensic pathologist ruled that she could not have taken that amount of medication by accident; however, the autopsy alone could not resolve whether her death was a suicide or homicide.

A psychological autopsy ascertained that she had no history of mental illness, depression, significant physical illness, chemical dependency, or suicidal ideation or behavior. Nor was there any history of suicidal behavior in her family. On the other hand, Ms. Guthrie had known for more than a year that her husband was having an affair and that he had plans to divorce her. Although heightening possible motivation for suicide, this knowledge was not learned proximate to her death. Contraindicating her risk for suicide were the following findings:

- She was excited about her daughter's upcoming wedding.
- She was self-conscious about her weight and would not have wanted to be found naked.
- The prevalence of suicidal drowning in a bathtub in the USA is less than 2%; she was found face-down, while those who commit suicide are generally found face-up, lying back in the water as if to sleep.

On the basis of this testimony and other evidence, the court found Guthrie guilty of homicide, a conviction that was upheld upon appeal to the state's supreme court.

The Daubert Standard

In spite of advantages offered to the coroner or medical examiner and the courts, the psychological autopsy has some weaknesses. First, clearly the decedent is not available for observation or questioning, making this type of evaluation different and more complicated than most evaluations conducted by mental health professionals. In addition, in its forensic use, the contractor for the psychological autopsy has a stake in the outcome of its findings, thus the information gathered from these sources can be biased. Moreover, to date there is no standardized protocol and method of conducting the psychological autopsy, thus raising questions about the procedure's validity and reliability.

This last difficulty poses significant problems in the American courts where it may be deemed inadmissible by court standards using the Federal Rules of Evidence. Admissibility of psychological autopsies has been questioned under the Daubert standard of evidence. The Daubert standard of evidence is derived from the Supreme Court decision, *Daubert* v. *Merrell Dow Pharmaceuticals, Inc.* (1993). This case essentially stated that the Federal Rules of Evidence, Rule 702 (2001), superseded the Frye test, which relied upon the evidence being based on a well-recognized scientific principle and subject to a standard of "general acceptance" by the relevant scientific community. Not all US states have accepted Daubert as a replacement standard (*Grady and Grady* v. *Frito-Lay, Inc.*, no. 43 WAP 2002, Pa. Sup.; 2003 Pa LEXIS 25); however, Daubert both incorporates the Frye test's criterion of general acceptance and extends it by establishing criteria that evidence must be "founded on scientific knowledge." The courts found in Daubert that "founded on scientific knowledge" meant that the testimony must be grounded in the methods and procedures of science and possess scientific validity to establish evidentiary reliability. The court listed four additional factors to be used as guidelines for admissibility, leaving the judge to be the final "gate-keeper" in deciding the admissibility of expert testimony. These factors are:

1. whether the theories and techniques employed by the witness have been tested
2. whether they have been subjected to peer review and publication
3. whether the techniques employed have a known error rate
4. whether they are subject to standards governing their application.

While the Daubert standard is based on a US Supreme Court decision and, therefore, has its most immediate impact limited to US federal courts, it provides the most rigorous and sensible guidelines for admissibility to date.

Intention

The primary criteria for suicide involve evidence that the death resulted from a self-inflicted act and

intention. "Intention" means to "have in mind" that death, as we know it to be the cessation of consciousness, will result. Thus, intention refers to the aim, purpose, or goal of the behavior, e.g., to seek an end to/solution for unbearable/perceived unsolvable pain/problems of living.

In equivocal cases, factors descriptive of high intentionality (Table 2) are conscious awareness of consequences; goal of cessation; expectation of fatal outcome; implementation of a method of high lethality; minimal rescuability or precautions; premeditation; and communications. Where evidence exists for one or more of these factors, the probability of suicide increases.

As noted above, a large body of archived data (death scene descriptions, police reports, laboratory data, medical and mental health records, and criminal records) must be reviewed in conjunction with interviews with relevant observers and witnesses to derive sufficient information from which an opinion regarding the decedent's intent to suicide can be formed. The behavioral investigator must weigh such data relative to what is known about suicide (versus, for example, accidental death). Where it can be shown that the decedent had sufficient risk factors and state-of-mind evidence to describe an intent to die, then suicide would be determined as the manner of death. Where data and observations are sufficiently more persuasive to determine that intent to suicide was not present or could not be formed, e.g., because of alcohol or drug intoxication, then the manner of death would be determined to be accident. Needless to say, the behavioral investigator needs to be expert at and current in his/her knowledge of suicide risk factors to arrive at a reasonable opinion as to manner of death.

Table 2 Factors descriptive of high intentionality

- Conscious awareness of consequences: decedent was aware that an end to earthly existence would result from a self-inflicted, self-destructive act
- Goal: to seek death (as in cessation) as an alternative to a life of perceived, unremitting pain
- Expectancy: of a fatal outcome from self-inflicted action
- Implementation: lethality of method is known to be high; knowledge of method
- Rescuability: timing and location are chosen so as to prevent, thwart, or minimize the possibility of rescue or intervention. No attempt at self-rescue or help-seeking is evident after initiation of attempt
- Planning: premeditation is evident through evidence of active preparation, e.g., hoarding pills, purchase of weapon
- Communications: direct, overt communications of intent are made prior to action

The Autopsy Protocol

To date, a standardized protocol for conducting the psychological autopsy has not been published. Different researchers, clinicians, and forensic suicidologists have used similar protocols, but with different foci and length. This author has recently proposed such a standard protocol and argued for its common usage and adoption by those in forensic cases to aid in establishing better psychometric properties, notably the reliability and validity of this procedure. The proposed protocol is offered in Table 3.

Typically, the information sought through such a protocol is achieved through face-to-face interviews. These may be supplemented, where appropriate, by suicide assessment measures and scales. The overwhelming majority of these instruments were validated as self-report or interviewer-administered scales, all with living persons. Some have been adapted for use with family members of suicide decedents, especially those regarding children and adolescents.

It should be noted that some survivor informants, e.g., minors and the sick elderly, pose special challenges as interviewees. Clearly, minors need parental consent to be an informant. At times, surviving parents withhold such consent, alleging that their child would be adversely affected, i.e., emotionally distressed, by such an interview. A sick elderly interviewee may require family assistance in order to participate and may require special arrangements to facilitate an interview (e.g., multiple short interview sessions). Each potential interviewee should provide informed consent after reasonable discussion of the potential risks and benefits to their participation.

Conclusion

The psychological autopsy is a powerful tool for the skilled suicidologist. It cannot definitively define cause-and-effect relationships, thus it cannot validly inform an expert that a suicide definitely occurred; rather, it can better inform opinions as to whether a decedent likely completed suicide and provide a better understanding of pathways to the determined manner of death. As such, it informs coroners and medical examiners and the courts which are ultimately the decision-makers.

Information derived from psychological autopsies will necessarily be incomplete and the totality of data sources may serve to create a mosaic that is more impressionistic than factual. The light it shines on its subject is often filtered by the prismatic lenses of many observers. Nevertheless, it illuminates. As an intensive single-case research procedure, the

Table 3 A psychological autopsy protocol

Recommended documentation/archival records
- Medical records
- Police records
- Legal records
- Criminal records
- School records
- Financial records
- Suicide note or other documented communication (re: suicidal ideation or death wish)
- Military records
- Autopsy report
  - toxicology report, if available

Site of death
- Decedent's relationship to site
- Evidence of rescuability vs. precautions against rescuability
- Evidence of planning and/or rehearsal

Demographics
- Immigrant status
  - acculturation issues
- Residence relative to recent mobility
- Socioeconomic status
- Employment and financial status
- Age/gender/race
- Marital status
- Educational status
- Religion and religiosity
- Adopted vs. biological family status

Recent symptoms/behaviors
- Appeared depressed, sad, tearful, or moody
- Displayed symptoms of depression
- Expressed suicidal ideation or thoughts of death or dying
- Appeared to have made a change for the better
- Appeared anxious, or complained recently of anxiety or panic attacks
- Appeared agitated
- Behaved in an impulsive manner
- Displayed uncontrolled rage or aggressive behavior
- Demonstrated constricted thinking or ''tunnel vision''
- Disclosed feelings of guilt or shame
- Appeared confused, disoriented, or psychotic?
- Expressed feelings of hopelessness, helplessness, or worthlessness?
- Mental status: evidence of:
  - impaired memory?
  - poor comprehension
  - poor judgment
  - hallucinations or delusions?
- Showed an inflated sense of self or signs of magical thinking?
- Engaged in excessive risk-taking behaviors?

Precipitants to the death
- Had the decedent recently experienced or was the decedent anticipating:
  - Significant loss or losses (relationships, job, finances, prestige, self-concept, family member, moving, anything of importance to the person)?
  - Significant (or perceived significant) disruption of a primary relationship?
  - Legal troubles or difficulties with police?
  - An event which was or was perceived as traumatic
  - Significant life changes? (negative as well as positive, e.g., marriage, birth of child, promotion, etc.)
  - The completed suicide or suicidal behavior of a family member or loved one?
  - The anniversary of an important death, an important other loss, or another significant anniversary?
  - Exposure to the suicide of another through the media or personal acquaintance?
  - His/her death as evidenced by recently making preparations for death? (e.g., updating will, insurance policies, etc.)
  - An expressed wish to reunite with a deceased loved one or to be reborn?

Psychiatric history
- Of prior suicidal behaviors
- Of any prescribed psychotropic medications for anxiety, depression, or psychosis
- Of ever being hospitalized in a psychiatric setting? Where? When? Diagnosis?
- Of having seen a therapist or psychiatrist/pharmacologist (or other, e.g., PCP) in recent past
  - of being in therapy at the time of death. (If so, duration, quality of therapeutic alliance and compliance with treatment, diagnosis, etc.)
- Of ever expressing concerns about ''going crazy'' or of losing cognitive functioning

Physical health
- Recent visit to physician (note for what)
- Experiencing chronic pain
- Recent or past diagnosis or concerns re: chronic, fatal, or disabling disease
- Recent reduction in physical/functional capabilities
- Current medications; if so, compliance, recent changes in dosage or prescription

Substance abuse
- History of alcohol or drug abuse
- Recent attempts to discontinue alcohol or drug abuse; recent increase in pattern of abuse
- Degree of alcohol or drug use at time of death; evidence of binge drinking?
- Patterns of poly-substance abuse
- History of ''accidental overdose''; if so, when?, what drug?

Family history
- Sibling or parent who died a nonnatural death
- Level of support or observed closeness in nuclear and extended families
- Of significant physical, sexual, or emotional abuse
- Of substance abuse
- Of suicide
- Of violent behavior
- Of affective disorder or other mental health disorders in the family

Firearm history
- Of firearm ownership
- Recently purchase or otherwise obtaining a weapon?; if so, for what stated purpose?
- Care for weapons; What was the characteristic pattern of cleaning guns?
- Storage patterns for weapon(s)
- Of accidental discharge of firearm

Attachments/social supports
- Ability to create and maintain close personal relationships? Have a close confidante
- Ability to express feeling as needed (especially grief and anger) in relationships
- Recent talk about feeling unsupported, uncared for, not important in relationships

Table 3 Continued

- Relative success in:
  - personal relationships
  - work
- Attachment to hobbies, interests, religion, etc.
- Recent change in any relationship to the above attachments

Emotional reactivity

- History of violence toward others
- Impulsive behaviors
- Excessive rage or other uncontrolled, aggressive behavior

Lifestyle/character

- Typical coping patterns
- Perfectionism
- Self-destructive behaviors (such as self-mutilation, drinking/driving, etc.)
- Frequent crises, often those appearing self-created
- Victimization behaviors, e.g., bullied

Access to care

- History of help-seeking behavior
- Known barriers to healthcare (e.g., lack of insurance, no accessible caregiver)

Other areas of inquiry

- Occupational history
- Hobbies/interests
- Gambling history
- Degree of religiosity

psychological autopsy significantly improves manner of death determinations and offers clues to understand better the state of mind of those who complete suicide.

See Also

Crime-scene Investigation and Examination: Death-scene Investigation, United States of America; Suspicious Deaths; **Deliberate Self-Harm, Patterns**; **Expert Witness:** Daubert and Beyond; **Forensic Psychiatry and Forensic Psychology:** Assessment; Suicide Predictors and Statistics; **Medical Malpractice:** Psychiatry

Further Reading

Berman AL (1993) Forensic suicidology and the psychological autopsy. In: Leenaars AA, Berman AL, Cantor P, Litman RE, Maris RW (eds.) *Suicidology: Essays in Honor of Edwin Shneidman*, pp. 248–266. Northvale, NJ: Jason Aronson.

Brown GK (2003) A review of suicide assessment measures for intervention research with adults and older adults. Available at: Browng@landru.cpr.upenn.edu.

Cavanagh JTO, Carson AJ, Sharpe M, Lawrie SM (2003) Psychological autopsy studies of suicide: a systematic review. *Psychological Medicine* 33: 395–405.

Daubert *v.* Merrell Dow Pharmaceuticals, Inc., 509 US 579 (1993).

Federal Rules of Evidence, as amended, 28 U.S.C., Rule 702 (2001).

Gelles MG (1995) The psychological autopsy: an investigative aid. In: Kurke MI, Scrivner EM (eds.) *Police Psychology into the 21st century*, pp. 337–355. Hillsdale, NJ: Erlbaum.

Gelles MG, Ritchie EC (2002) Psychological autopsies: the current department of defense effort to standardize training and quality assistance. *Journal of Forensic Sciences* 47: 1370–1373.

Goldston DB (2003) *Measuring Suicidal Behavior and Risk in Children and Adolescents*. Washington, DC: American Psychological Association.

Jobes DA, Berman AL, Josselson AR (1986) The impact of psychological autopsies on medical examiners' determination of manner of death. *Journal of Forensic Sciences* 31: 177–189.

Litman RE (1980) Psychological aspects of suicide. In: Curran W, McGarry A, Petty C (eds.) *Modern Legal Medicine*, pp. 841–853. Philadelphia, PA: FA Davis.

Litman RE, Curphey T, Shneidman ES, Fraberow NL, Tabachnick N (1963) Investigations of equivocal suicides. *Journal of the American Medical Association* 184: 924–929.

Rosenberg ML, Davidson LE, Smith JC, *et al.* (1989) Operational criteria for the classification of suicide. *Journal of Forensic Sciences* 33: 1445–1456.

Shneidman ES (1981) The psychological autopsy. *Suicide and Life-Threatening Behavior* 11: 325–340.

Shneidman ES, Farberow NL (1961) Sample investigation of equivocal suicide deaths. In: Farberow N, Shneidman E (eds.) *The Cry for Help*, pp. 118–128. New York: McGraw Hill.

Snider JE, Hane S, Berman AL (submitted for publication) Research note: standardizing the psychological autopsy: addressing the Daubert standard.

Weisman AD, Kastenbaum R (1968) *The Psychological Autopsy: A Study of the Terminal Phase of Life*. Monograph series 4. New York: Community Mental Health Journal.

Forensic Interviewing

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Introduction

The principal determinant of whether a criminal case is solved is the completeness and accuracy of an eye-witness's account. Whether or not witnesses can provide complete and accurate reports is partially determined by factors not under the legal system's

control, such as the viewing conditions at the scene of the crime or the witness's memory and verbal skills. The focus here is on that part of the investigative process that the legal system can control, namely, how they interview witnesses.

Scientific Research on Interviewing

Prior to 1980 little scientific, experimental research had been conducted on the psychological processes underlying witness recollection. There were many demonstrations that witnesses misidentified innocent suspects or that witnesses incorrectly described the central elements of a crime (perpetrators, weapons, actions). However, little experimental research had been done to examine the causes of these errors, and more important, what can be done to improve witness recollection.

The two primary goals of a forensic interview with a cooperative witness are: (1) to elicit accurate recollections; and (2) to elicit extensive, detailed recollections. What are the psychological principles underlying accuracy and quantity of memory, and how can these principles be translated into effective interviewing techniques?

Accuracy of Witness Recollection

Although people may occasionally misperceive events, generally our perceptions of the external world are accurate. Therefore, if witnesses are encouraged to describe their perceptions naturally, and to volunteer only those recollections they are certain of, their testimony is likely to be accurate. Unfortunately, various factors inherent in forensic interviews conspire against such pure recollections. First, in response to open-ended questions (e.g., What did the robber look like?), witnesses, and especially young children, often provide short and incomplete answers. Second, witness narratives frequently wander off track into forensically irrelevant topics. In an effort to elicit more informative answers, interviewers ask many specific, closed-ended questions (e.g., How tall was the robber?). The drawback of asking closed-ended questions is that they elicit less accurate responses, as they entice witnesses to volunteer answers that they are not certain of. Forensic interviewers should therefore try to elicit information mainly through the use of open-ended questions. They should explicitly instruct witnesses not to guess, but rather to indicate, "I don't know." This is particularly important when interviewing young children, who might otherwise be motivated to provide answers, whether certain or not, simply to comply with their expected social role of answering questions. In reality, police interviewers rarely caution witnesses against guessing. If anything, just the opposite occurs when interviewers subtly reinforce or praise witnesses for volunteering answers (e.g., "You seem to remember a lot about the crime") or when interviewers utter the innocent comment, "good," after witnesses provide information. In their zeal to elicit complete, detailed responses, forensic interviewers may create a more serious problem of encouraging witnesses to fabricate incorrect memories.

Another potential threat to accuracy is that memories are sometimes constructed from knowledge sources other than the crime itself. That is, witnesses take in or encode information about a crime from a variety of sources, including conversations with other witnesses, the media, or even the interviewer him/herself. Witnesses may then incorporate these other sources of information into their memories of the crime, and then later forget where they acquired this information or incorrectly remember the source of information (known as "source-monitoring" errors). Interviewers should therefore be careful not to make suggestive comments or to convey their personal beliefs about how the crime was committed.

Well-trained interviewers are unlikely flagrantly to express their personal beliefs to witnesses consciously; however, they may subtly convey their beliefs unconsciously. For instance, in attempting to verify their hunch about the crime, police interviewers may subtly suggest the anticipated answer in the form of a suggestive question: Was it a red shirt? Respondents are sensitive to such implicit suggestions – after all, the police officer is an authority figure and may have knowledge of what transpired during the crime. This inferred belief may then be incorporated into the witness's later memory of the crime.

Of greater practical concern than police interviewers distorting witness recollections is the potential influence of nonpolice interviewers, who may have vested interests in witness recollections being slanted one way or another. For instance, defense attorneys are more successful when prosecution witnesses express doubt or remember the crime in a way that makes the defendant appear not culpable. Just the opposite, prosecutors benefit when witnesses express their memories confidently and remember the crime in a way that makes the defendant more palpably culpable. Clinical psychologists may have a completely different bias. Their main concern is the therapeutic value of the interview, and so they may be more interested in their client's "remembering" an event in a way that leads to a favorable therapeutic outcome, irrespective of its historical accuracy. Certainly, one is not charging any profession with

intentionally distorting memories through poor interviewing practices. Nevertheless the potential exists, and in fact, guided distortions of the truth are not rarities among forensic interviews.

Amount of Witness Recollection

Ideally, witness recollection will not only be accurate, but will also contain extensive information. Fortunately, recent theoretical advances in social and cognitive psychology have given rise to innovative interviewing techniques to increase the amount of information that witnesses recall. The interview process can be divided into three psychological processes: (1) social dynamics; (2) cognition; and (3) communication. For the interview to proceed effectively:

1. Both the witness and the interviewer must establish the proper social dynamics, with each person knowing and playing his or her role in the exchange of ideas.
2. The thought processes of both the witness and the interviewer must be efficient so that the witness can remember the details of the event and the interviewer can ask questions properly and keep track of the witness's description.
3. Both the witness and the interviewer must communicate their thoughts to each other. Witnesses must communicate their memories of the crime to the interviewer, and interviewers must communicate their investigative needs to the witness.

A thumbnail sketch of some of the basic concepts is presented here.

Social dynamics Police interview witnesses because they possess some information about the crime event that police do not know. In conversations between a curious person (police) and an expert (witness), the expert normally does most of the talking, while the curious person takes a more passive role, absorbing the expert's knowledge. In many police interviews, however, this norm is violated, with the police officer playing the dominant role and relegating the witness to a passive role. As a result of having been forced into this passive role, witnesses often generate relatively little information and respond with only brief answers – even though they possess extensive, relevant information. To inculcate the proper social dynamics, the police interviewer should: (1) state explicitly to the witness what are the expected social roles; (2) ask primarily open-ended questions; and (3) not interrupt witnesses before they have completed their answers. Unfortunately, recent studies examining police interviews with victims and witnesses show that interviewers violate all three of these recommendations. They rarely explain the proper social roles; they ask very few open-ended questions (almost all of their questions are closed-ended); and they frequently interrupt witnesses in the middle of their answers.

Because of the emotional and personal nature of many forensic investigations, interviewers should take time to develop a personal rapport with the witness, and especially when interviewing a victim. Police interviewers sometimes fail to develop this basic personal contact effectively, and as a consequence, victims do not feel comfortable divulging all of the details of emotionally charged and personal experiences.

Establishing a personal connection with the respondent is also important when interviewing suspects. Recent studies have shown that suspects are more likely to volunteer relevant information when they are treated respectfully, in a humane fashion, than when they are subjugated by a dominant interviewer who creates an adversarial relationship. This type of confrontational style, however, seems to be the most common approach to interviewing suspects.

Cognition The mental tasks of both the witness and the interviewer are extremely challenging in a criminal interview. Witnesses are asked to remember complex events in great detail. Interviewers must keep track of and notate witnesses' descriptions, which are often disorganized, and formulate insightful questions instantaneously. Fortunately, considerable knowledge about witnesses' and interviewers' mental processes has been amassed by cognitive psychologists and can be applied to the task. Some of the major principles are as follows:

1. Context reinstatement. People's memories for earlier events can be enhanced by putting them back into the same physical, emotional, or mental context as when they experienced the original event. Instructing witnesses at the time of the interview to think about their thoughts or the external environment at the time of the crime should therefore facilitate memory for the crime. The tactic of returning to the scene of the crime works because of context reinstatement.
2. Limited mental resources. People have only a limited amount of mental resources to process information. Any distracting signals (e.g., noises in the environment, or even interviewers asking questions) may therefore deflect a witness's mental resources away from remembering the crime. Interviewers should attempt to maintain a quiet environment, and to ask as few questions

as possible. (Despite the beliefs of many investigators, the most successful interviewers are those who ask the fewest questions.) Interviewers also have limited mental resources, so that having to formulate many questions (rather than asking fewer, but open-ended questions) will impair their ability to understand a witness's narrative. Tape-recording the interview, which frees interviewers from having to take copious notes, should also allow interviewers to listen and create follow-up questions more effectively.

3. Witness-compatible questioning. Each witness's mental representation of the crime is unique. Similarly, witnesses' world knowledge (e.g., about cars) and interests (e.g., hairstyles) differ from one another. To capitalize on these individual differences, interviewers should tailor their questions to each specific witness, exploiting his or her unique strengths. This rule is often violated when interviewers use a standardized crime report sheet to guide the interview, asking all witnesses the same questions and in the same order.

Communication Witnesses may have very good memories of the crime, but they may fail to communicate their knowledge effectively to the investigator. Some witnesses have difficulty because they are not verbally skillful – perhaps they are foreigners, or young children. Some events are difficult to describe because they are inherently nonverbal (e.g., the perpetrator's face). Interviewers can overcome these obstacles by encouraging witnesses to use nonverbal means to convey their knowledge, e.g., drawing a sketch of the crime scene or acting out an action sequence. Another communication problem is that witnesses sometimes withhold information because they do not realize it is forensically relevant. Similarly, witnesses describe events or objects only superficially even though they have detailed memories of the events, because they do not realize that investigators requires detailed descriptions. To overcome these communication problems, police interviewers need to convey their investigative needs clearly.

Sequence of the interview In addition to the individual component techniques, the sequence of the interview is critical to its success. The same questions and instructions will be less valuable if conveyed in the wrong order. The recommended order of conducting the interview is to: (1) develop a good personal rapport with the witness, preview the interview procedure, and establish the proper social role for the witness (actively generate information); (2) elicit an open-ended, uninterrupted narrative of the entire crime event; (3) follow up with more focused questioning (open-ended questions followed by direct probes) of the most informative sections of the narrative; (4) tie up any "loose ends," e.g., additional isolated facts, and account for inconsistencies; (5) review the information gathered; and (6) close the interview in a way that promotes open communication for future contact between the witness and police. Flexibility in the sequence is desirable, as cases vary from one another, although such flexibility increases the difficulty of online decision-making by the investigator.

Several alternatives to the traditional police interview have developed over the past two decades employing some or many of the principles described above. Some of the best-known interviewing protocols are the stepwise method, conversation management, the memorandum of good practice, and the cognitive interview. Excellent reviews of most of these procedures can be found in several sources, listed in Further Reading.

Scientific Testing: How Do We Know the Techniques Work?

Before adopting any interviewing techniques, there should be some objective evidence that they accomplish their goals. In order to determine objectively whether the aforementioned techniques work, scientists in the USA, Canada, the UK, Germany, and Spain have tested various interviewing procedures under tightly controlled laboratory conditions. In addition, field tests have been done with victims and witnesses of real crime. We summarize here the research to test the cognitive interview procedure, mainly because: (1) it includes most of the techniques described here; and (2) the research is extensive (over 70 published experiments) and has been conducted by a wide variety of researchers.

In typical laboratory studies, volunteer witnesses see a videotape of a simulated crime and then are interviewed about the crime details by someone who has been trained either to use the principles earlier described (cognitive interview) or to conduct a conventional police interview. The witnesses' recollections are tape-recorded and scored for amount recalled and accuracy. The results are stable and show that the cognitive interview elicits 40% more correct information than does the control-comparison interview. The accuracy rates are approximately the same, with only a small advantage for the cognitive interview. Two field studies, with real victims and witnesses of crime, were conducted in the USA and

the UK and found similar results. That is, police officers trained to use the cognitive interview elicited considerably more information from victims and witnesses than equally experienced police conducting conventional police interviews. We cannot know in real crimes whether witness recollections are accurate, because we do not know for certain what transpired in the crime. (That is one of the major advantages of conducting laboratory research.) The best estimate of recollection accuracy (based on corroborating testimony from other witnesses) suggests that the cognitive interview yields about the same or slightly more accurate responses than do conventional police interviews. We, therefore, have good reason to believe that the recommended techniques work to elicit considerably more extensive, and slightly more accurate, witness testimony.

There are no apparent costs of using the recommended techniques in terms of the quality and amount of information elicited. There may, however, be a practical cost. Specifically, more time is required to implement these procedures than to conduct a traditional police interview (using many specific, closed-ended questions). British police have commented that they often do not have adequate time to implement all of the component techniques. This is particularly true for the first police officer to respond after the crime. To remedy this situation, current research is being conducted: (1) to determine which of the techniques is most efficient; and (2) to develop a shorter version of the procedure.

Training Interviewers

How effectively police investigators learn to use proper interviewing techniques depends on the quality of the training they receive. Within the laboratory, some researchers have had remarkably greater success than others in training interviewers. The keys to training are to: (1) use a building-blocks approach, where the core techniques (e.g., asking open-ended questions) are taught first, and more refined techniques added later; (2) schedule the training over an extended period of time, so that learners are not overwhelmed with having to learn many techniques all at once; (3) provide extensive practice opportunities in controlled environments (e.g., role-playing exercises); and (4) provide constructive feedback on the interviewers' performance.

Although scientifically based advances in interviewing have been available for the past 20 or 30 years, they have only recently been incorporated systematically into police training and only in a few countries around the world. The most progressive training programs are to be found in Europe (UK, Sweden, Norway, Germany, the Netherlands) and Australia. Progress has been much slower in North America, although a recent publication by the US Department of Justice Technical Working Group for Eyewitness Evidence may speed up the learning process.

Interviewing Children

With an increased awareness of child abuse, many legal investigators and research psychologists have become more interested in the skill of interviewing children. Much of the research was motivated by the highly publicized cases of the 1980s in which preschoolers falsely accused their day-care teachers of having sexually abused children. Many of the claims were originally taken at face value. Later investigations, however, found that some of these allegations were false. Of greater concern is that these false allegations may have been promoted by poor interviewing techniques. Some of the questionable interviewing techniques included promising children rewards for making specific statements, informing children about other witnesses' statements, and asking children to speculate about events in question. Other problematic interviewing techniques used in these and other investigations include investigators conveying their preinterview biases to the children, and asking the same questions repeatedly, even after the child has answered the question. Finally, there is a common error of asking children very specific closed-ended suggestive questions. Many of these questioning procedures are problematic when interviewing adults. They are even more problematic when interviewing children, and especially young children, whose testimony is even more malleable. In light of this, more agencies throughout the world have been recording and monitoring child interviews and providing more specialized training for investigators who conduct child interviews.

When interviewed properly, children of all ages can provide useful and accurate information. Based on the extensive research done with child witnesses, many researchers and child protection agencies recommend the following interviewing tactics: (1) developing extensive rapport at the beginning of the interview; (2) asking open-ended questions; (3) adapting the language and questioning style for different age groups; (4) avoiding suggestive questions; and (5) avoiding complex questions. A particularly sensitive area of child interviewing for which guidelines have been developed is how to introduce the topic of the investigation (e.g., alleged

incident of abuse) but without using suggestive questions.

Young children who were allegedly sexually abused pose a unique dilemma for interviewers, because of children's limited vocabulary and knowledge about sexual activities and body parts. Some authorities have suggested using anatomically correct dolls to help overcome these limitations. If the dolls are used suggestively, however, that may encourage young children to fabricate sexual events. There is not a strong consensus on the use of these dolls, although most researchers agree that, if an interviewer does use these dolls, the interviewer must first receive a narrative statement on the event in question, i.e., anatomically correct dolls should be used only to clarify parts of a witness' statement made previously. Second, the interviewer must exercise extreme caution to avoid any hint of suggestion.

Exotic Interviewing Techniques: Hypnosis

Given the difficulty of eliciting extensive, detailed recollections from witnesses when using traditional interviewing methods, some have turned to exotic techniques, such as hypnosis, to assist witness memory. Although, periodically, one hears about breakthroughs in police investigations following a hypnotic witness interview, the research is not nearly so sanguine about the value of hypnosis. First, many people cannot be hypnotized, and even among people who can be hypnotized, many cannot be hypnotized to a deep level. Second, the research on hypnosis shows that it does not work reliably. As many laboratory studies show that it does not enhance memory as studies show that it does enhance memory. Third, and of greater concern, there are important costs associated with hypnotically refreshed memory. Specifically, under laboratory testing, hypnotized witnesses: (1) produce more fabricated recollections than those who are not hypnotized; (2) are more influenced by interviewers' misleading comments and questions than are nonhypnotized witnesses; and (3) are more confident in the accuracy of their recollections than are nonhypnotized witnesses – even when their recollections are false. As a result of these potential costs, hypnosis is often proscribed as an interviewing procedure in many jurisdictions, although note that several countries do permit hypnotically refreshed witness recollections.

Detecting Deception

When people report about criminal events, there is sometimes the concern that they may be deceptive. Interviewers therefore attempt to distinguish between truthful and false witnesses. Among many different qualitative approaches, the only approach to assess witness credibility that has been tested empirically is the so-called Criteria Based Content Analyses (CBCA), which is the core component of an elaborate credibility assessment system, Statement Validity Assessment (SVA). This approach is based on Undeutsch's hypothesis that true and false statements differ in quality and quantity and can therefore be distinguished. The SVA consists of three parts: (1) a structured witness interview; (2) an evaluation of the witness's statement according to CBCA criteria; and (3) a validity checklist incorporating information from the interview and the CBCA results. CBCA consists of 18 criteria, which are assumed to be present more often in accounts of true than false events. Examples of these criteria are whether the witness's statement was rich in details, whether it contained verbatim speech, and whether the witness questioned his or her own memory. Empirical research has found mixed results on the usefulness of the criteria, and moderating variables have yet to be fully explored. Although SVA has been recommended as the most useful tool in credibility assessment in some European legal settings, some researchers have expressed doubts concerning the validity of CBCA.

There is broad agreement that the usefulness of the CBCA criteria depends heavily on the way the witness's statement is elicited, and so SVA provides guidelines for conducting the interview. The CBCA criteria distinguish more effectively between true and false witness accounts when interviewers ask open-ended questions (to elicit more narrative responses) and refrain from using techniques to alter the witness's statement (e.g., suggestive questions).

Interviewing Suspects

Following several recent cases in which high-profile defendants were released from custody because they provided false or coerced confessions, the UK reviewed its policies of interrogating suspects. Current practice has much more in common with interviewing cooperative witnesses, i.e., developing rapport and treating suspects in a humane fashion in an attempt to elicit voluntary information. Police practices in the USA are more traditional, with more psychological ploys to elicit confessions and fewer legal restraints against deceiving suspects. Although there is no universally accepted technique of interrogating suspects, many American police who receive interrogation training are encouraged to minimize the suspect's perceived consequences of confessing.

The interrogator may offer justifications or face-saving excuses for having committed the offense (e.g., she tempted you by being dressed so provocatively) or may suggest that the suspect did not realize the seriousness of the offense, or that the interrogator him/herself might have done the same thing in the situation. There has been little formal research to examine whether this minimization strategy accomplishes its goal, namely, to encourage guilty suspects to confess without promoting false confessions from innocent suspects. Unfortunately, the news from recent laboratory studies is discouraging, as the minimization strategy appears to promote false confessions along with true confessions. In one such study, volunteer participants were more likely to "confess" to cheating in an experiment (providing answers to another, confederate participant) when the interviewer used the minimization strategy than when the interviewer did not use the strategy. Admittedly, generalizing laboratory results to real-world interrogations is tenuous, because laboratory "crimes" and the consequences of laboratory crimes cannot be as severe as those occurring in the real world. That is, we cannot charge research volunteers with having committed serious legal infractions and threaten to detain them if they do not cooperate. Nevertheless, there are grounds for concern. Furthermore, we have good reason to believe that at least some real-world confessions were probably coerced by improper police interrogation practices. Certainly this deserves more research.

Interviewing Techniques for Other Investigative Tasks

Although the focus here has been on police interviews of cooperative witnesses, there are many other forensic investigations that require eliciting information from people, e.g., internal affairs investigations, debriefing police (or military) after a critical event, war crimes investigations. On the surface, these tasks appear to be very different from interviews with cooperative witnesses. However, many of the described techniques should be equally effective with these tasks, and especially when there is a heavy component of memory and communication, as with debriefing police officers following a criminal investigation.

See Also

Identification: Facial; **Injuries and Deaths During Police Operations:** Shootings During Police Stops and Arrests; Special Weapons and Training Teams; **Recovered Memory**; **War Crimes:** Pathological Investigation

Further Reading

Ceci SJ, Bruck M (1995) *Jeopardy in the Courtroom: A Scientific Analysis of Children's Testimony.* Washington, DC: American Psychological Association.

Eisen JL, Quas JA, Goodman GS (2002) *Memory and Suggestibility in the Forensic Interview.* London: Lawrence Erlbaum.

Fisher RP, Geiselman RE (1992) *Memory-Enhancing Techniques in Investigative Interviewing: The Cognitive Interview.* Springfield, IL: CC Thomas.

Fisher RP, Geiselman RE, Raymond DS (1987) Critical analysis of police interviewing techniques. *Journal of Police Science and Administration* 15: 177–185.

Fisher RP, McCauley ML (1995) Information retrieval: interviewing witnesses. In: Brewer N, Wilson C (eds.) *Psychology and Policing,* pp. 81–99. Hillsdale, NJ: Erlbaum.

Flanagan EJ (1981) Interviewing and interrogation techniques. In: Grau J (ed.) *Criminal and Civil Investigation Handbook*. New York: McGraw-Hill.

George RC (1991) *A Field and Experimental Evaluation of the Three Methods Interviewing Witnesses/Victims of Crime*. Unpublished thesis, Polytechnic of East London.

Gudjonsson GH (2003) *The Psychology of Interrogations and Confessions*. New York: Wiley.

Inbau FE, Reid JE, Buckley JP, Jayne BC (2001) *Criminal Interrogation and Confessions,* 4th edn. Gaithersberg, ND: Aspen.

Memon A, Bull RA (1999) *Handbook of the Psychology of Interviewing.* Chichester, UK: Wiley.

Memorandum of Good Practice on Video Recorded Interviews With Child Witnesses for Criminal Proceedings (1992) London: Her Majesty's Stationery Office.

Milne R, Bull RA (1999) *Investigative Interviewing: Psychology and Practice.* Chichester, UK: Wiley.

Poole DA, Lamb ME (1998) *Investigative Interviews of Children: A Guide for Helping Professionals.* Washington, DC: American Psychological Association.

Technical Working Group for Eyewitness Evidence (1999) *Eyewitness Evidence: A Guide for Law Enforcement.* Washington, DC: United States Department of Justice, Office of Justice Programs.

Suicide Predictors and Statistics

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Introduction

The empirical study of suicide and suicidal behaviors provides the necessary data sets for the understanding of these multifaceted and complex phenomena. The limitations of these statistics and methods of data collection are reviewed first and then both an international and American snapshot of suicide, with particular reference to perpetuating and predisposing risk factors, are given. Finally the perspective toward understanding methods of suicide and how understanding both methods and risk leads to current best practice in suicide prevention are described.

Limitations

Accurate data are essential for the understanding of suicidal phenomena, efforts to assess and treat those at risk for suicide and suicidal behaviors, and to develop public health prevention programs.

There are several limitations and problems inherent in collecting data on suicide. Suicide is a low base-rate event. In the USA it accounts for 30 000 deaths annually, a rate of 10–11/100 000. Thus, large-scale prospective studies of those at risk are rare given the need to follow inordinately large samples over time. Moreover, retrospective studies must rely on archival documents and third-party data sources, as the object of study is unavailable for interview.

The primary archival document, of course, is the death certificate, but this provides little more than basic demographic information about the decedent. Moreover, coroners, particularly in rural communities and when the death involves a child or a member of a prominent family, may conceal the true manner of death in an effort to spare the family from the stigma associated with suicide or to protect the reputation or memory of the deceased. There is no reliable estimate of how much underreporting of suicides occurs, but best estimates suggest it is in the range of 15–20%. Moreover, underreporting – if it is indeed more common in certain types of suicides, for example, in minority groups – may distort the demographic picture of suicide.

In addition, data sets in the USA have not been linked. Thus, it may be learnt from a study of death certificates that a large proportion of decedents died by a firearm, but specifics such as the type of firearm, its storage, purchase, and whether it was used as a murder weapon immediately before the suicide are not described on the death certificate. Co-occurring events such as homicide–suicides can only be determined by linking police investigation reports to each individual death certificate. This is only now being initiated on a large scale, but on a pilot basis, in the USA through the National Violent Death Reporting System.

One consequence of the difficulties in collecting data on completed suicides is that the overwhelming majority of understanding of suicide originates from studies of nonfatal attempters. After all, these individuals survive their attempt to die by suicide and remain available for interview. However, here also, significant problems are encountered in that only a fraction of nonfatal suicide attempters are comparable in their character to suicide completers. An individual may be a nonfatal suicide attempter because of: (1) miscalculation of the number of pills needed to accomplish death; (2) external intervention or thwarted attempt; or (3) feigning suicide to have interpersonal influence over another person, e.g., to induce guilt. Rarely do studies differentiate or report samples of attempters by level of lethality (medical–biological dangerousness) inherent in the method used and/or circumstances of a nonfatal attempt.

Nomenclature Issues

Suicide and suicide behaviors reflect a range and variety of behaviors that are distinct from one another, yet overlap. Moreover, there are a number of self-harm behaviors that are not suicidal in intent, yet are self-destructive. For example, self-mutilators cut and/or burn themselves, but are not suicidal. Their intent is to feel pain or see blood. Their actions relieve tension or a dissociative state, or replace feelings of emptiness; the actor figuratively proclaims: "I bleed, therefore I am!" Rather than wanting to be dead, they feel more alive through these behaviors. At the same time, self-mutilators are at heightened risk for suicide. Suicidology's lack of a standardized nomenclature is referred to as a "tower of Babel."

Data Sources

As noted above, death certificates serve as the primary data source for the study of suicide. In the USA, these are sent to a state's vital statistics office and, ultimately, to the National Center for Health Statistics, which publishes mortality data for the country. The epidemiology of a country's suicide mortality is thus derived from the quality and limitations of death certificates.

From these data certain retrospective surveys are also possible. A "follow-back study" is a variant on the more complex and thorough "psychological autopsy." In a follow-back study, one or two primary informants, typically a spouse or family member, is interviewed, often by phone, about the decedent, using a standardized interview protocol. Archival documents are not included in this form of survey. Case-control formats allow derived data to be compared with other manners of death (e.g., natural or accidental).

Given that more than 90% of completed suicides have retrospectively diagnosable mental disorders, hospital admission and treatment records serve as a significant source of valuable data about patients who commit suicide (or who are admitted for a nonfatal suicidal behavior). Again, case-control formats allow significant comparisons with other at-risk clinical populations who do not have suicidal behavior.

Since 1991, the US Centers for Disease Control and Prevention have conducted biannually large self-report surveys of adolescent risk behaviors including questions regarding suicide ideation and attempt. However, the Youth Risk Behavior Surveillance (YRBS) is only administered to enrolled high-school students, thus does not extract information on more at-risk nonstudents in this age group, e.g., dropouts. Nevertheless it provides a rich database of both the prevalence of and trends in the occurrence of these behaviors. It has also been shown that surveys taken with guaranteed anonymity produce higher rates of positive responses to sensitive questions than survey methods which are not anonymous. In addition, the terminology used in questions varies and determines different observed rates of positive response.

Case studies reflect the idiosyncrasies inherent in suicide. Such qualitative data allow for the development of new hypotheses and exploration of more indepth understandings of suicidal individuals than are possible from quantitative research. For example, the 1961 suicide of author Ernest Hemingway offers a rich portrait of the role that a family history of suicide and mental disorder plays (Hemingway's father, a brother, a sister, and, to date, one granddaughter have also committed suicide). Another example is the classic Egeland and Sussex's 1985 study of affective disorders and suicides, among an Amish community in Pennsylvania, which found that over a 100-year period (1880–1980), 24 of 26 suicides were diagnosed with a major affective disorder. Moreover, almost three-fourths of the suicides clustered in just four families, each of which was also heavily loaded with affective disorders.

Metaanalyses are difficult because samples and methodology vary widely among studies. For example, Luoma and colleagues examined 40 international studies regarding contact with mental health and primary care providers before suicide. It was found that only one-third of suicides had contact with mental health professionals in the period before death. Similarly, primary care physicians saw more than twice as many suicidal individuals as did mental health care givers in the 30 days prior to death (45% versus 19%). Results such as these point to primary care providers as entry-point targets for prevention models designed to identify and assess suicidal individuals better.

Suicide is a multidimensional behavior, involving aspects such as psychiatric and psychological, biological (genetic and biochemical), sociological, philosophical, and theological. Each domain has its own discipline-specific methods of inquiry and experimental or qualitative methodology. All have contributed to the understanding of this complex phenomenon.

The Epidemiology of Suicide

International Statistics

The difficulties in studying suicide are nowhere more apparent than when attempting to study suicide on a worldwide level. It is tempting, for example, to compare countries with very low rates of suicide to those with the highest rates. However, each country has a different method of reporting mortality. Moreover, some have religious and cultural taboos against suicide (e.g., Egypt), making for high rates of reporting errors. In addition, changes made by the World Health Organization's (WHO) International Classification of Disease (ICD) system over the years make temporal comparisons more difficult. The WHO's published rates of suicide for males and females ostensibly allow global comparisons for the most recent available data (Table 1). Yet, these data only span from 1984 to 2001. Considering the range of sociocultural events and conditions that span these years, comparisons between and among countries become highly suspicious.

As depicted in Figure 1, very few data are available for Africa and some Middle-Eastern countries. Countries with high rates (top 10) are: Lithuania, Russian Federation, Belarus, Latvia, Ukraine, Sri Lanka, Slovenia, Hungary, Estonia, and Kazakhstan. Low-incidence countries include a number of South and Central American countries, Egypt, and Iran. The high rates among the former Soviet Republics have been attributed to their political – thus sociocultural and socioeconomic – instability and significant alcohol use.

As reported by the WHO (2001), the average suicide rate for 1996 of 53 countries was 15.1 per

Table 1 Suicide rates per 100 000 by country, year, and gender

Country	*Year*	*Males*	*Females*
Albania	2000	2.4	1.2
Antigua and Barbuda	1995	0.0	0.0
Argentina	1996	9.9	3.0
Armenia	2000	2.5	0.7
Australia	1999	21.2	5.1
Austria	2001	27.3	9.8
Azerbaijan	2000	1.2	0.4
Bahamas	1995	2.2	0.0
Bahrain	1988	4.9	0.5
Barbados	1995	9.6	3.7
Belarus	2000	63.6	9.5
Belgium	1996	29.4	10.7
Belize	1995	12.1	0.9
Bosnia and Herzegovina	1991	20.3	3.3
Brazil	1995	6.6	1.8
Bulgaria	2000	25.2	9.1
Canada	1998	19.5	5.1
Chile	1994	10.2	1.4
China (selected rural and urban areas)	1999	13.0	14.8
China (Hong Kong SAR)	1999	16.7	9.8
Colombia	1994	5.5	1.5
Costa Rica	1995	9.7	2.1
Croatia	2000	32.9	10.3
Cuba	1996	24.5	12.0
Czech Republic	2000	26.0	6.7
Denmark	1998	20.9	8.1
Dominican Republic	1994	0.0	0.0
Ecuador	1995	6.4	3.2
Egypt	1987	0.1	0.0
El Salvador	1993	10.4	5.5
Estonia	2000	45.8	11.9
Finland	2000	34.6	10.9
France	1999	26.1	9.4
Georgia	2000	4.8	1.2
Germany	1999	20.2	7.3
Greece	1999	5.7	1.6
Guatemala	1984	0.9	0.1
Guyana	1994	14.6	6.5
Honduras	1978	0.0	0.0
Hungary	2001	47.1	13.0
Iceland	1997	19.1	5.2
India	1998	12.2	9.1
Iran	1991	0.3	0.1
Ireland	1999	18.4	4.3
Israel	1997	10.5	2.6
Italy	1999	11.1	3.4
Jamaica	1985	0.5	0.2
Japan	1999	36.5	14.1
Jordan	1979	0.0	0.0
Kazakhstan	1999	46.4	8.6
Kuwait	2000	1.6	1.6
Kyrgyzstan	1999	19.3	4.0
Latvia	2000	56.6	11.9
Lithuania	2000	75.6	16.1
Luxembourg	2001	23.9	10.7
Malta	1999	11.7	2.6
Mauritius	1999	21.1	9.5
Mexico	1995	5.4	1.0
Netherlands	1999	13.0	6.3
New Zealand	1998	23.7	6.9
Nicaragua	1994	4.7	2.2
Norway	1999	19.5	6.8
Panama	1987	5.6	1.9
Paraguay	1994	3.4	1.2
Peru	1989	0.6	0.4
Philippines	1993	2.5	1.7
Poland	2000	25.9	4.9
Portugal	2000	8.5	2.0
Puerto Rico	1992	16.0	1.9
Republic of Korea	2000	18.8	8.3
Republic of Moldova	2000	26.7	4.1
Romania	2001	20.8	3.9
Russian Federation	2000	70.6	11.9
Saint Kitts and Nevis	1995	0.0	0.0
Saint Lucia	1988	9.3	5.8
Saint Vincent and the Grenadines	1986	0.0	0.0
Sao Tome and Principe	1987	0.0	1.8
Seychelles	1987	9.1	0.0
Singapore	2000	12.5	6.4
Slovakia	2000	22.6	4.9
Slovenia	1999	47.3	13.4
Spain	1999	12.4	4.0
Sir Lanka	1991	44.6	16.8
Suriname	1992	16.6	7.2
Sweden	1999	19.7	8.0
Switzerland	1999	26.5	10.0
Syrian Arab Republic	1985	0.2	0.0
Tajikistan	1999	4.2	1.6
Thailand	1994	5.6	2.4
Tfyr Macedonia	2000	10.3	4.5
Trinidad and Tobago	1994	17.4	5.0
Turkmenistan	1998	13.8	3.5
Ukraine	2000	52.1	10.0
United Kingdom	1999	11.8	3.3
United States of America	1999	17.6	4.0
Uruguay	1990	16.6	4.2
Uzbekistan	1998	10.5	3.8
Venezuela	1994	8.3	1.9
Yugoslavia	1990	21.6	NA[a]
Zimbabwe	1990	10.6	5.2

Source: http://www.who.int/mental_health/prevention/suicide.
[a]NA, not available.

100 000. The rate of suicide is almost universally higher among men compared to women by an aggregate ratio of 3.5 to 1, with an average of 24.0 for males and 6.8 for females (Table 1); with the single exception being in rural China, where female suicides are more frequent than male suicides. For both genders, suicide increases with age; for both genders, the peak is in the 75+ age group (Figure 2). Between 1950 and 1995, the incidence of suicide among males has steadily risen by about 40%; although females have followed the same trend, the rate of increase is only about half that of males.

Since 1950, the age distribution of individuals who complete suicide has changed. Suicides among those

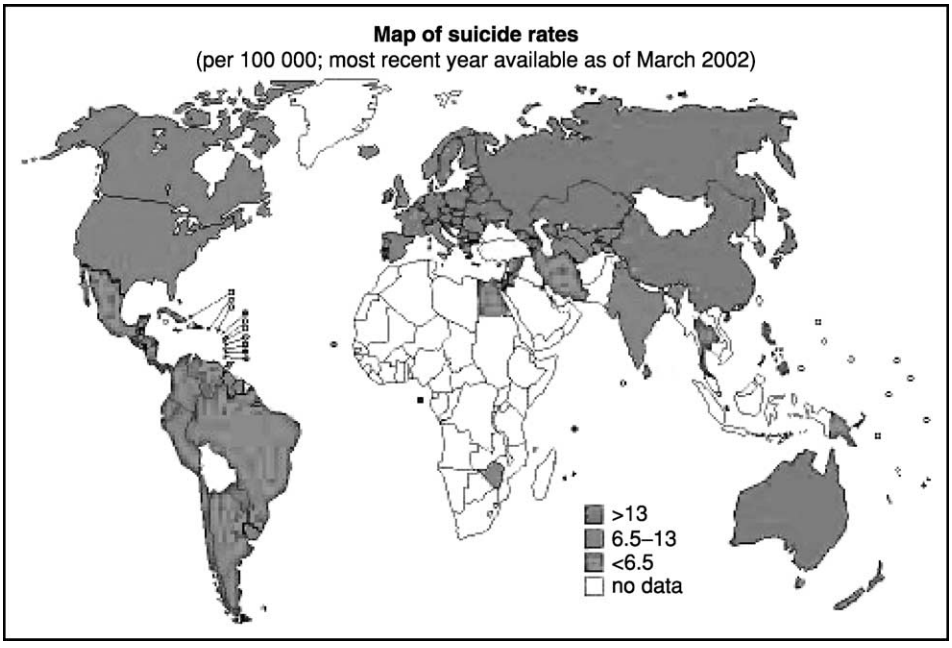
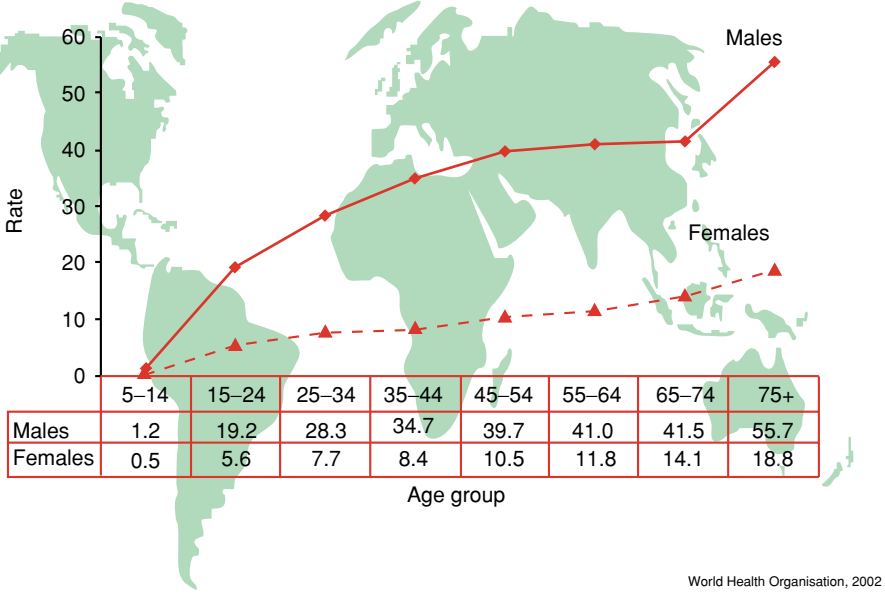


Figure 1 Map of suicide rates, international. Reproduced with permission from the Suicide prevention pages, in the Mental Health section of the World Health Organisation's web resource www.who.int



	5–14	15–24	25–34	35–44	45–54	55–64	65–74	75+
Males	1.2	19.2	28.3	34.7	39.7	41.0	41.5	55.7
Females	0.5	5.6	7.7	8.4	10.5	11.8	14.1	18.8

Figure 2 Change in age/gender distribution, international. Reproduced with permission from the Suicide prevention pages, in the Mental Health section of the World Health Organisation's web resource www.who.int

aged between 5 and 44 increased from 40% to 55% of all completed suicides by 1996 (Figure 3). Youth suicides appear to be a problem worldwide. Suicide ranks as one of the top three causes of death among 15–34-year-olds; suicide rates among males between the ages of 15 and 24 have dramatically increased in the last few decades, particularly in Australia, New Zealand, Portugal, Spain, and Greece. Suicide among the young is now the leading or second leading cause of death after accidental deaths in these countries.

The WHO has estimated that worldwide there are between 815 000 and 1 000 000 suicides annually.

United States of America

Suicide is the 11th leading cause of death in the USA; 30 622 suicides were recorded in 2001, accounting

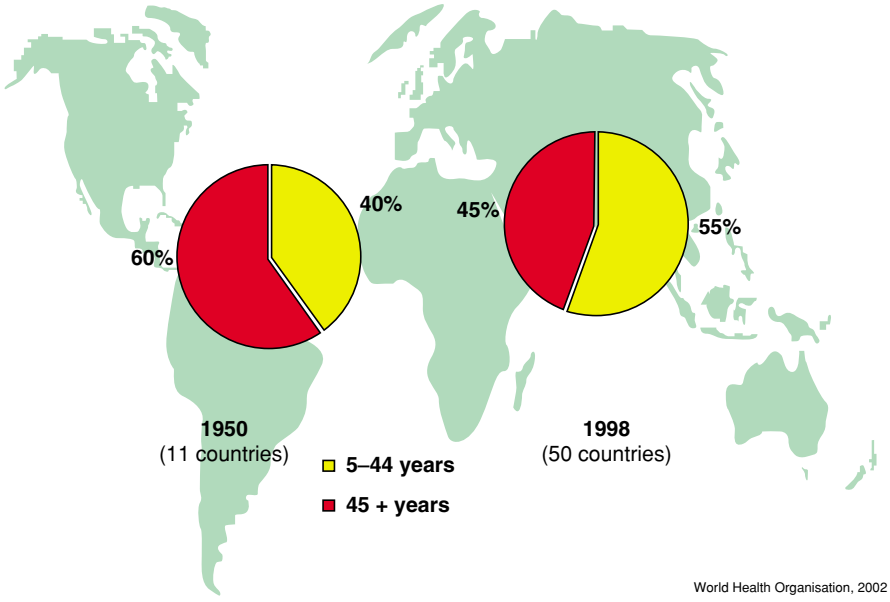


Figure 3 Distribution of gender per age, international. Reproduced with permission from the Suicide prevention pages, in the Mental Health section of the World Health Organisation's web resource www.who.int

Table 2 Total suicide rates, USA, 1990–2001

Year	*Suicide rate*
1990	12.4
1991	12.2
1992	12.0
1993	12.1
1994	12.0
1995	11.9
1996	11.6
1997	11.4
1998	11.3
1999	10.7
2000	10.7
2001	10.7

Source: http://webapp.cdc.gov/sasweb/ncipc/mortrate.html.

Table 3 Suicide injury deaths and rates per 100 000, all races, both sexes, all ages in the USA in 2001

Age group	*Number of deaths*	*Rate*
00–04	0	0.00
05–09	7	0.03
10–14	272	1.30
15–19	1611	7.95
20–24	2360	11.97
25–29	2389	12.56
30–34	2681	12.89
35–39	3176	14.23
40–44	3459	15.16
45–49	3260	15.67
50–54	2682	14.55
55–59	1985	13.98
60–64	1332	11.98
65–69	1212	12.71
70–74	1220	13.89
75–79	1219	16.41
80–84	973	18.88
85+	769	17.29
Unknown	15	
Total	30 622	10.73

Source: http://webapp.cdc.gov/sasweb/ncipc/mortrate.html.

for a rate of 10.7 per 100 000, a small but steady decrease since 1990 (Table 2). Male suicides (17.6 100 000) occur four times as frequently as female suicides (4.1/100 000). The highest rate of suicide across all age groups is for individuals aged 80–84 years (18.9/100 000). The elderly comprise 12.4% of the population, yet represent 17.6% of suicides. Table 3 shows rates by age group for the USA.

In the USA, Caucasians have the highest rate (11.9/100 000), followed by American Indian and Alaska Natives (10.6/100 000), African-Americans (5.36), and Asians and Pacific Islanders (5.1) (Table 4). Temporal increases, however, have occurred differentially among gender and racial groups. For example, although the rates for 15–19-year-old Caucasians and African-Americans of both genders have increased since 1960, there has been a dramatic increase for males. Similarly, the suicide rate for black males increased by a much faster rate than did the rate for white males (234% versus 136%; Table 5). These increases have primarily been attributed to parallel increases in the use of firearms in suicide by these groups.

Suicide rates in the USA generally declined among those aged 45 years and higher between 1950 and 2000. For those aged between 15 and 24 years, however, suicide rates increased between 1950 and 1995, but decreased in the last several years (Figure 4). Notably, a decrease in the use of firearms and an increase in the prescribing of antidepressant medications have been postulated to explain this more recent decrease in rates.

Nonfatal suicide attempts For every completed suicide it has been estimated that there are 25 nonfatal attempts. The great majority of nonfatal attempts occur among younger individuals, with estimated ratios of attempts to completions in the range of 100:1, compared to 4:1 among the elderly. However, the only large-scale data that exist come from the YRBS. As depicted in Figure 5, 18% of US high-school students reported thinking about suicide in the last 12 months, 15% made a plan, more than 8% claimed to have made an attempt, of which about one in three required medical attention. This latter estimate (about 2.5% of all respondents) has remained reasonably steady since 1993 (Figure 6). It is also significant to note that, in contrast to data on completed suicides, the gender ratio is reversed for nonfatal attempts: females attempt suicide three times more often than do males.

Table 4 Suicides (*N*), suicide rates, all ages, both genders, per race, in the USA in 2001

Ethnic origin	*N*	*Rate*
Caucasian	27 710	11.91
African-American	1957	5.26
American Indian/Alaska Native	321	10.57
Asian/Pacific Islander	634	5.14
Total	30 622	10.73

Source: http://webapp.cdc.gov/sasweb/ncipc/mortrate.html.

Table 5 Suicide rates, 15–19-year-olds, by gender and race, in the USA from 1960 to 2000

	Caucasian		*African-American*	
Year	*Males*	*Females*	*Males*	*Females*
1960	5.9	1.6	2.9	1.1
2000	13.9	2.9	9.7	1.5
% increase	136	81	234	36

Source: Centers for Disease Control, National Center for Health Statistics, various years.

Prediction and Risk

The prediction of suicide is impossible. Given its low base-rate of occurrence, any predicted outcome of suicide will have an inordinately high rate of false positives. Even in conditions of high risk, the overwhelming majority of individuals will not die by suicide. For example, it has been estimated that depressed psychiatric inpatients admitted with suicide ideation or attempt behavior have a 6% lifetime risk of suicide; yet this means that for every predicted suicide there will be 15 nonsuicidal deaths. Moreover, although ample knowledge about suicide risk factors exist, comparably little is known about near-term risk, i.e., observations that have both sensitivity and specificity for being associated with suicidal behavior in the next several hours or even days. The 6% prevalence estimate noted above for depressed and suicidal inpatients is for lifetime risk, not near-term risk. The best that can be done is to note individuals who

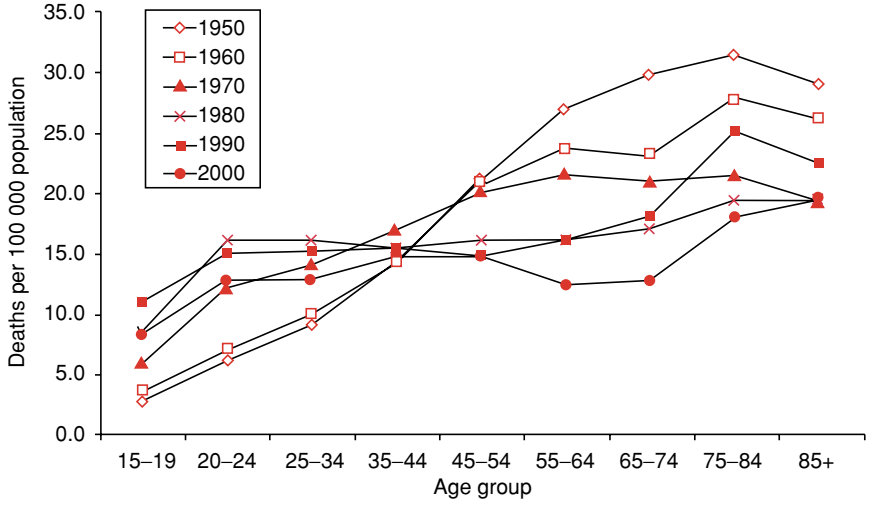


Figure 4 Suicide rates by age, 1950–2000.

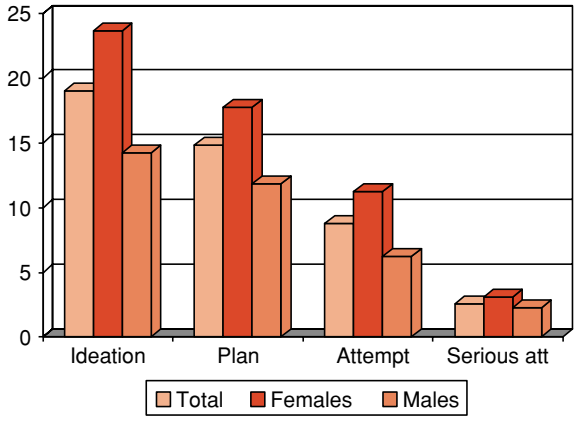


Figure 5 Youth risk behavior surveillance data in the USA, 2001.

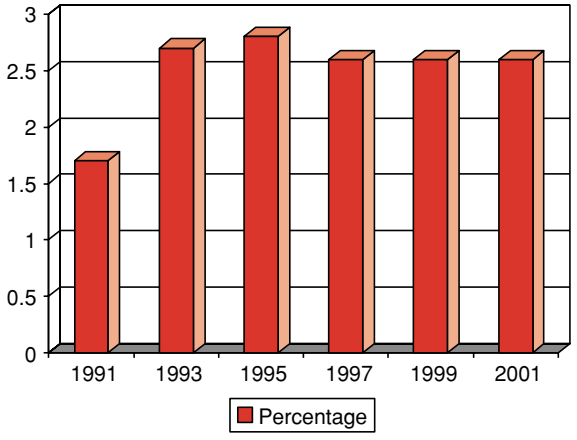


Figure 6 Youth risk behavior surveillance in the USA from 1991 to 2001, injurious attempt in last 12 months.

carry a greater risk for suicide than others who do not share characteristics known to be associated with those who commit suicide.

Perpetuating Risk Factors

Perpetuating risk factors for suicide include variables such as family history of suicide, violence, substance abuse, and mental disorder requiring hospitalization. Offspring of parents with these histories have 5–11 times the risk of completing suicide as those without these parental histories. A history of a previous suicide attempt is a significant perpetuating risk factor. One in three of those with a suicide attempt history will make further attempts, with 10–15% ultimately completing. Sexual abuse and a history of multiple personal losses are also classified as perpetuating risk factors. Perpetuating risk factors increase vulnerability to suicide, but are not modifiable or open to change by interventions.

Table 6 Frequency of mental disorder diagnosis in completed suicide

Affective disorders
Range: 39–89%; Median: 61%
Substance abuse
Range: 19–63%; Median: 41%
Anxiety disorders
Range: 3–27%; Median: 10%
Schizophrenias
Range: 0–16%; Median: 6%
Axis II
Range: 31–57%; Median: 42%

Data from 16 Psychological Autopsy Studies.

Predisposing Risk Factors

Predisposing risk factors increase vulnerability to suicidal behavior but are considered modifiable. Examples of significant predisposing risk factors are described below.

Mental disorder Acute psychiatric disorders impair coping and resilience, amplify stress, decrease protections, and have associated emotional reactivities and cognitive distortions that heighten risk for suicide. The most commonly observed mental disorders in adult suicides are:

- affective disorders
- schizophrenia
- alcoholism
- axis II (personality), cluster B disorders.

The most commonly observed mental disorders in adolescent suicides are:

- affective disorders
- substance abuse disorders
- conduct disorders.

Table 6 depicts the range and median frequencies of diagnostic conditions in completed suicides. The co-occurrence of mental disorders, for example depression plus alcoholism, is significantly associated with increased risk. Table 7 depicts the most common metal diagnoses by gender for teen suicides as derived from case-controlled psychological autopsy studies.

Suicide ideation Thoughts of suicide precede suicidal behavior, especially planned behaviors. However it has been estimated that in almost one-third of nearly fatal attempts the thought of suicide preceded the attempt by 5 min or less.

Hopelessness Thoughts of self, others, and future which are absolute and negative (e.g., "I'm a terrible person," "Nobody cares about me," "Nothing will ever change") have been found to be more associated with suicidal behavior than depression.

Social isolation Individuals who lack social supports, who do not seek or accept help when in need, or who are acutely alone and lonely, who are alienated or in conflict with systems of attachment, e.g., adolescents who drop out of school, tend to be more at risk for suicidal behavior. Suicides are more frequent among divorced and separated adults than among those who are married.

Medical conditions (axis III disorders) A number of significant physical diseases and conditions are associated with increased risk for suicide. Table 8 shows the odds ratios for several illnesses which have been found to pase increased risk.

Decreased protective factors Suicides are less frequent among those who have:

- positive self-esteem
- confidence in personal abilities to control and cope
- cognitive, such as problem-solving, skills
- accessible and available supports
- internal (e.g., religiosity) and external (e.g., family, children) constraints.

Table 7 Most common mental disorders from case-control psychological autopsy studies of teen suicides, USA

Disorder	*Male*	*Female*
	(*n* = 213)	(*n* = 46)
Mood disorder	50%	69%
Antisocial disorder	43%	24%
Substance abuse	38%	17%
Anxiety disorder	19%	48%

Source: Shaffer D, Gould MS, Fisher P, *et al.* (1996) Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry* 53(4): 339–348, Brent DA, Baugher M, Bridge J, *et al.* (1999). Age- and sex-related risk factors for adolescant suicide. *Journal of the American Adolescent of Childhood and Adolescent Psychiatry* 38(12): 1497–1505.

Table 8 AXIS III: medical conditions increasing risk

Illness	*OR*
HIV/AIDS	6.6
Malignant neoplasms of head/neck	11.4
Chronic renal failure – dialysis	14.5
Spinal cord injuries	3.8
MS	2.4
Systemic lupus – erythematosus	4.3
Peptic ulcer	2.1

Adapted from Kelly MJ, Mufson MJ, Rogers MP (1999) Medical settings and suicide. In: Jacobs DJ (ed.) *The Harvard Medical School Guide to Suicide Assessment and Intervention.* San Francisco, CA: Jossey-Bass.

Contributing Risk Factors

Contributing risk factors are conditions that facilitate suicidal behavior and increase risk among those so exposed. Examples of contributing risk factors are described below.

Exposure to suicidal models Being exposed to the suicidal behavior of others, even if only through the media, has been found to be associated with imitative (copy-cat) behaviors among vulnerable others. For example, when Marilyn Monroe died by suicide in 1962, there was an immediate, statistically significant, and unexpected increase in suicides among young white females. The assumption is that her death communicated a nonspecific loss of hope among those who might have looked to her as an icon of womanhood, success, and beauty. Clusters of suicides (three or more suicides among individuals in a defined community over a short time span) are commonly observed and account for about 5% of all youth suicides.

Personality disorders (*Diagnostic and Statistical Manual* axis II) An axis II diagnosis increases suicide risk, particularly for personality disorders with cluster B traits: antisocial, borderline, histrionic, or narcissistic. Borderline personality disorder has been the subject of considerable study, with the lifetime risk of completed suicide being about 7%. Comorbidity with an axis I depression considerably heightens lifetime risk.

Access and availability of firearms Especially in the USA, where firearms account for almost three of five suicides, there is a clear relationship between the ready availability of firearms in the home and suicides by those living there. The risk of suicide of a household member is increased nearly five times in homes with (versus without) guns.

Acute intoxication Alcohol decreases controls and increases impulsivity. Often vulnerable individuals use alcohol as an antidepressant. As many as 50% of suicides and attempted suicides have been noted to have elevated blood alcohol at the time of these events.

Insomnia Lack of sleep impairs coping ability and cognitive performance and heightens confusion and emotional reactivity.

Precipitating Risk Factors

Precipitating risk factors are proximate, triggering life events that serve as the "last straw" to potentiate suicidal behavior among predisposed individuals.

Sometimes these are anticipated versus actual; still, they give rise to acute stress, heightened panic, and feelings of shame and fear that mediate suicidal behavior. Examples of precipitating risk factors are:

- losses of relationship, e.g., a breakup of adolescent romantic involvement, divorce, death of close attachment
- threat of legal action or incarceration
- unemployment
- threat of financial loss or bankruptcy.

Subpopulation Risk Profiles

Certain subpopulations have been studied with regard to idiosyncratic risk factors. Notable among these are:

1. Persons in jail or prison. Suicides by those behind bars have, necessarily, been studied retrospectively and descriptively. Common characteristics of jail suicides include: younger (under age 32 years), male, unmarried, incarcerated for nonviolent offenses, particularly involving drug or alcohol offenses (and being intoxicated or under the influence at the time of arrest). Suicides typically occur by hanging when staff supervision is less available, when in isolation or seclusion, and soon after incarceration. A majority, although rarely screened, had a diagnosable mental disorder and expressed hopelessness or suicide ideation. Suicides in prisons tended to be among older males, serving long-term sentences for major offenses, and by those with histories of psychiatric illness and suicidal behavior.
2. Psychiatric inpatients. As acute psychiatric disorders are significant predisposing risk factors for suicide, those more at risk are those with disorders necessitating inpatient care. Those hospitalized for affective disorder, schizophrenia, substance abuse disorders, and anxiety disorders have greatest risk, and also of concern are those with comorbidity. Fawcett and colleagues in 1990 particularly noted the role of severe psychic anxiety, anxious ruminations, global insomnia, psychotic delusions, and recent alcohol abuse in the near-term (1-year) risk of suicide among those with major affective disorder. The risk of suicide among hospitalized depressed patients is highest in the first few weeks following discharge from inpatient care and, most probably, among those with incomplete remissions or inadequate attention to continuity of care in a context of increased or renewed stress.
3. Alcoholics. Comorbidity with major depressive episodes particularly characterizes suicides among alcoholics. In addition, poor social support, unemployment, serious medical illness, social isolation and/or loss, or disruption of a close interpersonal relationship describes those at heightened risk.

Methods of Suicide

As noted above, the modal method of suicide in the USA is firearms. This is true for both males and females with a higher proportion for males; and among the old and the young, with a higher proportion among the elderly. Hanging is the most commonly used method worldwide and second most frequent method of suicide in the USA. Ingestion is the most frequent method used by nonfatal attempters.

The potential decedent's intention, in part, defines the choice of method. Individuals intent on dying by means of their self-inflicted act typically choose more lethal methods to carry out their intention. This is especially true in planned versus impulsive suicides. However, a number of other factors, working independently and in combination, define the choice of suicide method. These include:

- Accessibility and availability. In jail settings, for example, where other means are limited, hanging is the method of choice. Pesticides are the method of choice in rural China.
- Knowledge, experience, and familiarity. In cultures where firearms are readily available, those comfortable with guns will commit suicide more by firearms than will others not experienced or comfortable with guns.
- Meaning, symbolism, and cultural significance. Drug ingestion may be preferred by females as a method that is not destructive to appearance; drugs are also associated with a peaceful sleep, thus a nonpainful death. In addition, there are a number of popular jumping sites in various countries that serve as suicide magnets because of their association with a new life and beauty.
- State of mind. The more bizarre and/or disfiguring the method, on average, the more likely the decedent was psychotic.

Linking Statistics to Prevention

Comprehensive data about suicide, its prevalence and risk, shed light on trends, points of entry for intervention, and opportunities for prevention. When based on sound data, a range of targeted prevention approaches have been shown to decrease suicide rates.

For example, a study in Utah found that almost two-thirds of youths who died by suicide had contact with the juvenile justice system, and that there was a

direct correlation between the number of contacts and increased suicide risk. Many of these youths were not in contact with the school system. Few had received mental health care. Most had multiple minor offenses over many years. These findings identified the juvenile justice system as the best available point of entry to identify youths at risk for suicide and to deliver mental health care to them.

A number of prevention approaches are based on the concept of risk reduction. These range from case-finding approaches, models of early detection and referral, to treatment of those at risk, such as screening programs and gatekeeper education programs, to means-restriction programs, wherein available access to lethal means is made more difficult. Means-restriction programs offer excellent statistical data on prevention.

- In Washington, DC, the number-one site for suicidal jumpers was the Duke Ellington bridge. Spanning a city park, the bridge offered a 37.5-m (125-ft) fall to the roadbed surface below and averaged about four suicides per year. Of interest, an immediately adjacent and equally high bridge (the Taft bridge) averaged fewer than two suicides per year. In the mid-1980s suicide barriers were constructed on the Ellington bridge. In the succeeding 5 years the frequency of suicidal jumps from this site declined to zero. Correspondingly, jumps from the Taft bridge increased only slightly.
- In the UK, suicide attempts with acetaminophen (paracetamol) were found to have steadily increased from the 1970s and by 1996 nearly half of all overdose admissions to general hospitals in England and Wales involved painkillers, especially acetaminophen, either alone or in combination with other drugs. Moreover, nearly 75% of all attempters reported that they ingested the drug on impulse. Recognizing its potential lethality and the ease of its availability, advocates promoted national legislation that limited the number of tablets sold per sale and instated packet warnings about the dangers of acetaminophen overdose. Consequently, over the subsequent 2 years, the number of deaths due to acetaminophen overdose fell to 18%, a 10% reduction in nonfatal attempts using acetaminophen to overdose, and a 30% reduction in admissions to liver units because of acetaminophen-induced liver damage.
- As noted earlier, the USA has initiated a National Violent Death Reporting System. This system, now being pilot-tested in 13 states, links data sets from multiple sources. Consequently, co-occurring homicides and suicides can now be analyzed, sources and storage patterns of firearms used for suicide can be traced, the role of substance abuse in completed suicides can be better established, and geocoding of neighborhoods of higher risk and the consequent identification of environmental characteristics associated with higher risk conditions can be identified.

Conclusion

Surveillance of suicide and suicidal behaviors and correlated risk factors is essential to both a better understanding of suicide and to the implementation of promising prevention programs. Accurate data and linked data sets provide a perspective for both clinical and public health approaches to reduce suicide mortality and morbidity.

See Also

Forensic Psychiatry and Forensic Psychology: Psychological Autopsy; **Suicide:** Etiology, Methods and Statistics; Parasuicide; Youth Suicide

Further Reading

Bonner RL (1992) Isolation, seclusion, and psychosocial vulnerability as risk factors for suicide behind bars. In: Maris RW, Berman AL, Matltsberger JT, Yufit RI (eds.) *Assessment and Prediction of Suicide,* pp. 398–419. New York: Guilford Press.

Brent DA, Baugher M, Bridge J, *et al.* (1999) Age- and sex-related risk factors for adolescent suicide. *Journal of the American Academy of Childhood and Adolescent Psychiatry* 38(12): 1497–1505.

Busch KA, Fawcett J, Jacobs DG (2003) Clinical correlates of inpatient suicide. *Journal of Clinical Psychiatry* 64: 14–19.

Fawcett J, Scheftner WA, Fogg L, *et al.* (1990) Time-related predictors of suicide in major affective disorder. *American Journal of Psychiatry* 147: 1189–1194.

Goldsmith SK, Pellmar TC, Kleinman AM, Bunney W (eds.) (2002) *Reducing Suicide: A National Imperative.* Washington, DC: National Academies Press.

Hawton K (2002) United Kingdom legislation on pack sizes of analgesics: background, rationale, and effects on suicide and deliberate self-harm. *Suicide and Life-Threatening Behavior* 32: 223–229.

Hawton K, van Heeringen K (eds.) *The International Handbook of Suicide and Attempted Suicide.* Chichester, UK: Wiley.

Hayes LM (1998) Suicide prevention in correctional facilities: An overview. In: Puisis M (ed.) *Clinical Practice in Correctional Medicine,* pp. 245–256. St. Louis, MO: Mosby.

Jacobs DG, Brewer M, Klein-Benheim M (1999) Suicide assessment. In: Jacobs DG (ed.) *The Harvard Medical School Guide to Suicide Assessment and Intervention,* pp. 3–39. San Francisco, CA: Jossey-Bass.

Joiner TE, Pettit JW, Rudd MD (2004) Is there a window of heightened risk if patients gain energy in the context of continued depressive symptoms? *Professional Psychology: Research and Practice* 35: 84–89.

Kelly MJ, Mufson MJ, Rogers MP (1999) Medical settings and suicide. In: Jacobs DJ (ed.) *The Harvard Medical School Guide to Suicide Assessment and Intervention.* San Francisco, CA: Jossey-Bass.

Lönnqvist JK (2000) Psychiatric aspects of suicidal behavior: depression. In: Hawton K, van Heeringen K (eds.) *The International Handbook of Suicide and Attempted Suicide,* pp. 107–120. Chichester, UK: John Wiley.

Luoma JB, Martin CE, Pearson JL (2002) Contact with mental health and primary care providers before suicide: a review of the evidence. *American Journal of Psychiatry* 159(6): 909–916.

Maris RW, Berman AL, Silverman MM (2000) *The Comprehensive Textbook of Suicidology.* New York: Guilford Press.

O'Carroll PW, Berman AL, Maris R, *et al.* (1996) Beyond the tower of Babel: a nomenclature for suicidology. *Suicide and Life-Threatening Behavior* 26: 237–252.

Shaffer D, Gould MS, Fisher P, *et al.* (1996) Psychiatric diagnosis in child and adolescent suicide. *Archives of General Psychiatry* 53(4): 339–348.

Tanney BL (1992) Mental disorders, psychiatric patients and suicide. In: Maris RW, Berman AL, Matltsberger JT, Yufit RI (eds.) *Assessment and Prediction of Suicide,* pp. 277–320. New York: Guilford Press.

Tanney BL (2000) Psychiatric diagnoses and suicidal acts. In: Maris RW, Berman AL, Silverman MM (eds.) *Comprehensive Textbook of Suicidology,* pp. 311–341. New York: Guilford Press.

World Health Organization (1999) *Figures and Facts about Suicide.* Geneva: WHO.

Mental Handicap and Learning Disability

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Introduction

Forensic science and mental retardation are unfamiliar acquaintances, with little research completed in forensic contexts on this special population. Traditionally, the mentally handicapped have drawn the interest of the education community, as well as pediatrician and child psychology specialists, given the setting in which mental handicaps first present problems to the individual, or are noticed by loved ones.

Mental handicaps and learning disorders do not translate well into criminal law matters. Perhaps this reflects the frame of reference of designating people as "mentally retarded" or "learning-disordered." Unlike psychiatric diagnostic standards, which identify conditions for treatment and specific treatment protocols, mental handicap and learning disorders are classified and designated in order to denote eligibility for social services, or special education, for example.

Treatment of the mentally retarded only became pertinent in developed nations when abuses of the retarded provoked discomfort over the prospect that these individuals were merely warehoused, sometimes with great neglect. Increasing sensitivity to the rights of the mentally handicapped has prompted examination of victimization patterns, and forensic research has promoted safeguards to the vulnerable among the mentally retarded.

Concerns about sexual exploitation have been offset by trends toward reintegrating the mentally handicapped and enabling them to exercise autonomy over their rights, including their own personal sexuality. The mentally handicapped also pose unique treatment challenges for future risk prevention.

In recent years, mental handicap has received greatest consideration within the criminal law due to concerns about the rights of the mentally handicapped defendant. Particular attention has focused on interrogation and criminal responsibility and accountability. However, workplace antidiscrimination laws, disability assessments, and protection statutes also concern themselves with learning disorders and their significance.

Definitions and Characteristics

Mental Retardation

Mental retardation is diagnosed under the *Diagnostic and Statistical Manual*, 4th edition (DSM-IV-TR) as:

1. significantly subaverage intellectual functioning: an IQ of 70 or below on an individually administered IQ test
2. concurrent deficits in present adaptive function (i.e., the person's effectiveness in meeting the standards expected for his/her age by his/her cultural group) in at least two of the following areas: communication, self-care, home living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health, and safety
3. such limitations present at least prior to the age of 18.

The first criterion reflects that the individual has failed to develop an even remotely comparable

intelligence level that would be appropriate for his/her age group. Diagnosis of mental retardation is possible in individuals with an IQ below approximately 70, or two or more standard deviations below the norms established for the given intelligence test administered.

The second criterion, adaptive functioning, encompasses how effectively individuals manage essential life demands and how capable that individual is of independently functioning relative to others of his/her age group, sociocultural background, and community.

Adaptive skills are assessed in the individual's typical environment, across all aspects of life. Difficulties with navigating through the daily course of life are more inclined to respond positively to remedial efforts than is the cognitive IQ, which tends to remain a more invariable trait.

Significant differences exist in the definition adopted by the DSM-IV-TR and the American Association on Mental Retardation (AAMR). DSM-IV-TR is geared toward the clinical and research community, and has avoided the legal arena, while the AAMR advocates for the retarded defendant to be handled extrajudicially, and has revised the criteria for retardation twice in recent years to enhance its advocacy mission.

Most recent AAMR criteria only require general deficits in adaptive function, without greater specificity.

The AAMR generalization of criteria, in keeping with its policy agenda, considerably expands the range of potential convicted killers who would be declared ineligible for capital punishment in the USA (which recently declared execution of the convicted retarded murderer unconstitutional). However, the revised AAMR definition is not rooted in any scientific research, but rather a social policy initiative. Given the problems in the forensic interface of existing diagnosis of mental retardation noted below, the AAMR definition is nothing more than an advocacy statement of little scientific substance.

Subtypes

Mental retardation is subdivided into levels of severity based on intellectual and functional impairment. The degree of impairment from mental retardation has a wide range, from profoundly impaired to mild or borderline retardation. The level of mental retardation is the main determinant in the degree of outside assistance the person with mental retardation needs to live an independent life.

DSM-IV-TR identifies four degrees of severity that reflect the degree of functional impairment: (1) mild; (2) moderate; (3) severe; and (4) profound.

Mild mental retardation Failure to adapt normally and grow intellectually may become apparent early in life or, in the case of mild retardation, not become recognizable until school age or later. Taken as a whole, those with mild mental retardation account for the greatest segment of the population with the disorder, and are considered to be only a little slower than average in learning new information and skills. IQ scores, by DSM-IV-TR criteria, range from approximately 50 to 70.

As children, signs of mild mental retardation may not be readily apparent. These children may not be identified until they enter school. Social and communication skills progressively develop during the preschool years (0–5 years), as does the acquisition of learned information (through the late teens). As adults, many will be able to lead independent lives in the community, achieving social and vocational success adequate for minimum self-support. Typically, however, many will also require support in the form of supervision, guidance, and assistance, especially when under unusual social or economic stress.

Moderate mental retardation Individuals with moderate mental retardation comprise approximately 10% of the entire population of the mentally retarded. Similar to those with mild mental retardation, those with moderate mental retardation also acquire communication skills during early childhood years. IQ scores range from the 35–40 to 50–55 range.

Those with moderate mental retardation may also benefit from vocational or occupational training and, with guidance and supervision, can often maintain adequate personal care. However, unlike those who are mildly retarded, those with moderate mental retardation are unlikely to progress beyond the second-grade level in academic subjects. By their teen years, such individuals may begin experiencing issues that interfere with the development and growth of peer relationships.

As adults, individuals with moderate mental retardation may be able to perform unskilled or semi-skilled work under supervision, and adapt well to life in a supervised community, provided that they have ample training and support.

Severe mental retardation Of those who are mentally retarded, 3–4% of the population consists of those with severe mental retardation – with IQ scores ranging from the 20–25 to 35–40 range. Individuals with a severe or profound level of mental retardation frequently have additional disabilities beyond mental retardation.

In contrast to the groups with mild and moderate mental retardation, these children, in the early

childhood years, attain little or no communication skills. Additionally, children with this level of mental retardation are unlikely to be able to learn to read or write, but may be able to be toilet-trained and learn to dress with assistance. While some learn to talk during the school-age period, they are severely limited in their ability to understand or retain scholastic information.

As adults, this group requires more assistance than persons with mild or moderate mental retardation, as even though they may be able to perform simple tasks in closely supervised settings, they still require considerable basic physical care or supervision to live.

Profound mental retardation Individuals who have a profound level of mental retardation frequently have disabilities such as an identified neurological condition that accounts for their mental retardation. IQ scores fall below the 20–25 range. Early in childhood, such individuals exhibit significant impairments in sensorimotor functioning.

This does not necessarily imply that the deficits are inoperable, as motor development, self-care, and communication skills may all improve if appropriate training is provided. Ideally, development in profoundly retarded individuals transpires in a highly structured environment with consisted, individualized aid and supervision.

Mental retardation, severity unspecified A diagnosis of mental retardation, severity unspecified, is recommended when there is a compelling case to be made for mental retardation but standardized testing instruments cannot successfully evaluate the person – whether it be the result of infancy, extensive impairment, or other characteristic of the examinee. Generally, the younger the individual, the harder it is to assess for the presence or absence of mental retardation.

Cautions and limitations The diagnostic criteria fail application in two major respects: inadequate attention to specific importance of impulsivity, and of judgment. These are the two areas that, arguably, have greatest relevance to forensic questions, be they criminal, employment, civil (intentional infliction of emotional distress, or malpractice actions arising from the conduct of an individual), or parental rights.

Learning Disorders

According to DSM-IV-TR, learning disorders are diagnosed when the examinee's achievement on individually administered, standardized tests in reading, mathematics, or written expression is substantially below that expected for age, schooling, and level of intelligence. These learning problems first present in childhood and early scholastic settings, and may persist into adulthood. They significantly interfere with academic achievement or activities of daily living that require reading, writing, or mathematical skills.

Those with learning disorders do not demonstrate the otherwise broad intellectual and functional impairments of mental retardation. Ordinarily, testing reveals achievement that is two standard deviations below what would be otherwise expected, given an individual's IQ. Occasionally, if a mental disorder or cultural influence impacts performance on testing, that discrepancy may be one to two standard deviations below the level correlated with IQ testing.

Learning disorders, in assessment, need to be distinguished from poor achievement reflective of a different cultural background, poor teaching, lack of opportunity, and problems adjusting to the school setting.

Associated Qualities

Criteria to meet a diagnosis of mental retardation or learning disorders must be present before age 18. Examinees who are natives to the USA will have drawn attention to themselves long before that age, however. Unless the child grew up in conditions of considerable neglect, the family would have sought medical and psychiatric consultation for problems relating to behavior, or to "slowness."

In the forensic examination, collateral sources of information must be queried to ascertain a number of associated features.

Peers, family, and significant others can be quite instructive. Retarded individuals are not age-appropriate; peers experience them as younger, and they occupy roles within their families that equate with a noticeably lower level of developmental achievement or maturity. If the defendant is retarded, his/her family may describe a history of emotional and material dependence; they would be involved in a caretaking role, not the other way around. The quality of their relatedness, even within the family, is immature and shallow.

These sources provide additional information to resolve questions of the defendant's ability to live and manage alone, manage finances, care for his/her self, and safety. Documentation of individuals' autonomy and handling of responsibilities, such as that available from banks and landlords, is also helpful and minimizes bias.

Assessing friends and friendships elicits information about the defendant's social function, how he/she fits

in with peers, the basis for their friendship, and shared qualities. The retarded defendant may have few friends; those he/she does have may be expected to describe shallow, limited relationships; they may use a mentally retarded male for strength or other material benefit, perhaps as a lookout for a gang. More sinister acquaintances may welcome a retarded defendant because of his explosive temper and willingness to be a soldier for them.

Retarded individuals who attract no friends may rely on their family for companionship. Likewise, parents with retardation may rely on their own parents to assume decision-making responsibilities and more for the child.

Former significant others can demonstrate and reveal much about the age-appropriateness of the defendant's behavior. These witnesses should be questioned about the quality of the relationship, sexuality, and the defendant's relatedness to others. The age and qualities of that significant other should likewise be appraised; a peer-appropriate relationship would be expected when one retarded individual becomes involved with another.

Academic problems, noted from within the school system, would create a baseline of intelligence-testing results that should be available for forensic psychiatric examination.

School records are also pivotal to the assessment of retardation. Grades and scores demonstrate the academic difficulties that are fundamental to a diagnosis of retardation. Academic records in particular further distinguish whether the history is more reflective of learning disorders or of behavioral problems independent of intellectual deficiencies and developmental disorder.

Records of referral to special education also illuminate the nature of a defendant's earlier strengths and limitations as a student. The absence of such referral needs to be followed up with school officials to appraise the likelihood that retardation would be missed, and how.

Academic records may further bear upon the individual's capability of incorporating new information – as well as the mechanisms to train the individual best. In custody, guardianship, and parental rights determinations, this information is particularly vital to courts.

Previous psychiatric records not only enable a diagnosis of retardation to be established, but also contribute to recognizing co-occurring, or comorbid, conditions, and their treatment history. Life events, such as head trauma that causes dementia, or diseases such as encephalitis, can be identified through review of these records as well. Important members of the support system, who can provide additional input on the defendant's behavior and way of relatedness, can also be identified this way.

Counseling records and specific periods of failing may illustrate problem periods for the individual in younger years – but not retardation, especially if these academic difficulties are episodic, or periodic, but not persistent.

Employment records are also helpful. While any work history at all may erroneously suggest that retardation is not present, it is still important to follow up with an employer about the nature of the work the defendant had been performing. Information about how the individual came to be hired, job description, the independence with which the individual worked, and his/her job performance all distinguish whether the defendant had age-appropriate work skills that would surpass what would be expected of someone with retardation.

At the same time, a person who clearly needed close supervision, who was taken in by a caretaker environment that provided a sheltering schedule, may support the diagnostic impression that the defendant has significantly subaverage work performance.

This possibility is further borne out by special arrangements afforded to that employee, including special accommodations. Information from co-workers, especially those who have not been coached, about the competencies and limitations of the defendant, and an accurate understanding of why he/she would have been terminated, is helpful.

The learning-disordered may or may not have deficits that reflect themselves at the workplace. A long-range work history, affording the opportunity to examine closely duties, performance, and reason for termination, will reveal whether a learning disorder manifested during scholastic years persisted into adulthood, and whether it does impair a person's functions at the workplace.

Diagnostic Testing

To assess an individual properly for the presence of the disorder, it is imperative that the examining professional be diligent in selecting testing instruments and when conducting the subsequent result interpretation. Factors such as physical disabilities, socioeconomic status, and native language, if not accounted for, can limit and possibly skew the diagnostic procedure.

Significantly subaverage functioning and adaptation, on at least two domains, is required for the diagnosis of mental retardation. This information is best ascertained through history. Such history may be gathered in a systematic way using instruments listed in Table 1. Nevertheless, as the ratings of

Table 1 Intelligence tests

Intelligence test	*Used for*	*What is measured and how*	*Can it detect malingering?*
Wechsler Adult Intelligence Scale – third edition (WAIS-III)	Ages 16–89	Measures verbal comprehension (vocabulary, similarities, information), perceptual organization (picture completion, block design, matrix reasoning), working memory (arithmetic, digit span), and processing abilities (sequences). Contains separate verbal and performance scales	Atypical responses may be an indication; however, this should be supplemented by another test. Utilization of multiple psychological tests is the best way to detect faked mental retardation
Wechsler Intelligence Scale for Children – third edition (WISC-III)	Ages 6–16	Verbal Scale measures ability to express and comprehend speech, including vocabulary, short-term auditory memory, and ability to categorize and compute; Performance Scale consists of tasks that measure ability to perceive and act on spatial relationships. Specific pattern of strengths and weaknesses can indicate specific learning disabilities	No
Stanford Binet Intelligence Scale, fourth edition	Ages 2–23	Measures verbal and nonverbal areas of development; also provides assessment of mathematical reasoning and short-term memory capacity. Caution: Large margin of error (5 points)	No
Kaufman Assessment Battery for Children (K-ABC)	Ages 2.5–12.5	Sequential Processing Scale contains hand movement, number recall, and word order subtests; Simultaneous Processing Scale consists of spatial tasks that measure acquired knowledge; Achievement Scale contains subtests that measure expressive vocabulary, arithmetic, reading, etc. Relies on visual stimuli (therefore, not suitable for individuals with visual impairments); applicable to diverse populations because less culturally dependent and focuses on problem-solving process, not content of test items	No
Raven's Standard Progressive Matrices (SPM)	Ages 6 and older	Multiple-choice test measures nonverbal intelligence; specifically, the ability to form perceptual relations and reason by analogy, independent of language and formal schooling	Limited – tasks progressively increase in difficulty so performance should steadily decline; malingerers tend to have scattered result pattern
Slosson Intelligence Test – Revised (SIT-R)	Ages 0–27	Measures crystallized verbal intelligence from the following cognitive domains: information, comprehension, arithmetic, similarities and differences, vocabulary, and auditory memory; one of the few measures capable of assessing severely and profoundly mentally handicapped populations because its IQ scales range from 36 to 164. Consists of 187 questions administered orally	No
Kaufman Brief Intelligence Test (K-BIT)	Ages 4–90	Includes both verbal (vocabulary subtest involving word knowledge and concepts) and nonverbal (matrices subtest involving pictures and abstract designs) assessment of problem-solving abilities; can rule out language problems as cause of impairment	No
Test of Nonverbal Intelligence 3 (TONI-3)	Ages 6–89	Subjects examine figures, identify the relationships among them, and select correct response by pointing; instructions are pantomimed. This nonverbal assessment of intelligence, aptitude, abstract reasoning, and problem-solving is well suited for verbally or neurologically impaired, learning-disabled, and mentally retarded individuals	No
California Verbal Learning Test (CVLT-II)	Ages 16–89	Subjects presented with list of words and asked to recall them across series of trials. In addition to assessing verbal learning and memory, there are measures encoding strategies, learning rates, and error types	Yes – low rate of correct responses to forced-choice items may be an indication. Caution: susceptible to coaching

Columbia Mental Maturity Scale (CMMS)	Ages 3–9	General reasoning ability is assessed by classification of pictorial figures arranged in series of overlapping levels; each level is equivalent to a specific chronological age	No
Stoelting Brief Intelligence Test S-BIT)	Ages 6 and older	Nonverbal measurements of reading, organizational skills, abstract comprehension, and logical reasoning; ideal for measuring intelligence of children and adolescents thought to have communication or neurological impairment	No
Wechsler Memory Scale – Revised	Ages 16–74	Written test; measures both visual and auditory capacities of immediate, general delayed, and working memories. Used with aphasic and organically brain-injured individuals and the elderly	Yes – poor performance on Attention/ Concentration index may indicate malingering; severely impaired individuals typically perform well
Halstead-Reitan Neuropsychological Battery	Age 5 and older	Consists of 10 tests designed to measure elements of memory, abstract thought, language, sensory-motor integration, imperception, and motor dexterity. Type/ location of brain damage can be identified	Yes – formula is applied to scores that take into account history, other test data, and behavioral observations
Bender Gestalt test	Ages 4–85	Subject reproduces figures on cards; visual-motor functioning, visual-perception skills, neurological impairment, and emotional disturbances are assessed based on rotation, distortion, symmetry, and perseveration of these reproductions	Yes – inhibited figure size, changed position, distorted relationships, complex additions, and gross simplification may indicate malingering[a]
Luria-Nebraska Neuropsychological Battery	Ages 15 and older	Designed to assess neurologically impaired patients. Generates 14 scores: motor, rhythm, tactile, visual, receptive speech, expressive speech, writing, reading, arithmetic, memory, intellectual processes, pathognomonic, left hemisphere, and right hemisphere functioning	No
Wisconsin Card-Sorting Test (WCST)	Ages 6.5–89	Respondents are required to sort the cards according to different principles (color, form, or number) and to alter their approach when instructed. Primarily used to assess perseveration and abstract thinking; capable of measuring strategic planning, organized searching, goal-directed behavior, and impulsive responding. Sensitive to frontal lobe dysfunction	No
Rey Complex Figure Test (RCFT)	Ages 6–69	Assesses neuropsychological functioning via measurements of visuospatial recognition memory, response bias, processing speed, and visuospatial constructional ability. Discriminates brain-damaged patients with documented memory impairment who are able to live independently from those who are not	Limited – measures response bias
Comprehensive Test of Nonverbal Intelligence (CTONI)	Ages 6–90	Six subtests require subjects to view pictures and engage in problem-solving tasks involving analogies, categorizations, and sequences. Subjects respond by pointing – no reading, writing, or verbalization is required. Useful for testing individuals with language, neurological, or fine motor skill impairment, and non-English speakers	No
General Ability Measure for Adults (GAMA)	Ages 18 and older	Assessment of general intelligence; consists of matching, sequence, analogy, and construction tasks. Nonverbal format overcomes cultural, linguistic, and educational barriers	No
Slosson Full-Range Intelligence Test (S-FRIT)	Ages 5–21	Assessment of verbal, performance, and cognitive ability	No

[a]Schretlen D and Arkowitz H (1990) *Behavioral Sciences and the Law* 8: 75–84.

these scales do not control for forensic examiner bias, they should not be used in forensic evaluations to the exclusion of accounting for all history that these scales inventory.

Intelligence Testing

The diagnosis of mental retardation is aided through up-to-date standardized intelligence testing. Specifically, testing with standardized psychometric instruments, with scores that fall at least two or more standard deviations below the age-group mean for the standardized psychometric instrument used, support a diagnosis of retardation. In the case of a specific learning disorder, the test results reflect deficits in a particular area, such as reading or arithmetic.

In order to contribute to a valid understanding of the defendant's intelligence, a test must be properly standardized for those of the examinee's age, cultural and racial background, language of fluency, and educational level of achievement.

Commonly employed tests are the Wechsler Memory Scale – Revised, Wechsler Adult Intelligence Scale (WAIS), now in its third version, the Halstead-Reitan Neuropsychological Battery, the Luria-Nebraska Neuropsychological Battery, the Wisconsin Card-Sorting Test, the California Verbal Learning Test, and the Rey Complex Figure test. Brief versions of the IQ tests are demonstrated to be inadequate relative to the full versions of the WAIS and Slosson (Table 1).

Tests must be administered with standard protocol by examiners fluent in the language of the examinee, and such practices must be verifiable, analogous to the gathering of physical evidence. Therefore, examiners who administer intelligence testing must offer complete documentation of raw data of the examination when submitting their findings. In addition, when testing is done in the context of an adversarial proceeding, the intelligence testing should be unobtrusively videotaped in order to verify the integrity of the protocols used.

Testing must be administered at the time of the forensic assessment. A defendant diagnosed as retarded or learning-disordered earlier in life may have improved from earlier testing, given the educational or psychosocial interventions previously available, such that intelligence testing no longer reflects that the defendant is retarded or learning-disordered.

Because earlier and later versions of a specific test may be administered, examiners must be prepared to educate the court about the discrepancies one might expect across versions of a test. The WAIS – Revised (WAIS-R), for example, is likely to result in scores that are somewhat lower than those recorded on the WAIS for nonretarded examinees. Retarded examinees tend to show less difference, although the WAIS-R scores higher than the WAIS in the mildly and moderately retarded, especially on the verbal and full-scale domains. For this reason, the moderately retarded may appear, on later testing, to be mildly retarded – though only full assessment of adaptive skills can resolve that question, including performance on standardized measures of adaptive behavior (Table 2).

For learning disorders, similar considerations apply. Wechsler Intelligence Scale for Children – third edition (WISC-III) scores are one-half to one-third of a standard deviation lower than comparable scores on the WISC-R. Having been given both tests, learning-disordered students may appear to have worsened as a result of this artifact.

Memory impairment, as measured through the Wechsler Memory Scales, may not correlate as reliable with lower IQ measurements on the WAIS-R. Adjustments in interpretation may be necessary, therefore, in interpreting findings in tested mentally retarded defendants.

Other Diagnostic Testing

Old records of the retarded will include information crucial to the assessment of the defendant. Specifically, developmental delays would have been noticed by parents or other caregivers, and will have arranged for diagnostic workup of these problems. When a child first appears to be slow, there is enough concern within most families that a search for a cause, particularly a reversible cause, is recommended by the family pediatrician. Previous head trauma, if associated with long-term consequences, would also leave records of assessment.

Medical workup of retardation is likely to yield specific information relevant to legal proceedings only when genetic testing and neurological scanning are done. Positive findings on genetic testing may support the longstanding nature of the neurodevelopmental problems, and the fallout from unsuccessful and inexorably failed attempts to adapt over the life cycle.

Radiological scans, such as magnetic resonance imaging (MRI) and positron emission tomography (PET), may also demonstrate positive findings. However, subtle abnormalities in brain imaging can also be found in normal variants. Furthermore, such structural brain abnormalities may have developed later in life and cannot therefore be used to account for a predisposing condition to mental retardation unless the examinee's history reflects a life of poor adaptation and low function.

Because some medical conditions may have been poorly investigated in the examinee's early years, it is helpful to get a full diagnostic medical workup. Visual, facial, cardiac, neuromuscular, auditory, and other

Table 2 Measures of adaptive behavior

Test of adaptive behavior	*Used for*	*Description*
Vineland Adaptive Behavior Scales (VABS) – Expanded Form	0–18 years; low-functioning adults	Assesses communication, daily living, socialization, and motor skills
Adaptive Behavior Assessment System (ABAS)	Ages 5–89	Assesses individual's ability to perform and frequency of tasks in the following domains: communication, community usage, functional academics, home living, health and safety, leisure, self-care, self-direction, and work. Determines how well the individual responds to daily demands and is capable of living independently
Adaptive Behavior Inventory (ABI)	Ages 5–18	Consists of five scales: Self-Care Skills, Social Skills, Communication Skills, Academic Skills, and Occupational Skills. Third party rates child's task performance on 4-point scale. Useful to screen for mental retardation or emotional disturbance
Adaptive Living Skills Curriculum and Checklist (ALSC)	Ages 2+	Inventory of 80 behaviors in four domains: Personal Living Skills, Home Living Skills, and Community Living Skills, and Employment Skills
Inventory for Client and Agency (ICAP)	Children and adults	16-page booklet completed by third party used to plan and evaluate services for people with disabilities. Includes 77 adaptive behavior items in the following domains: social/communication skills (interactions, language), personal living skills (independence), community living skills (work skills, money management, and motor skills). Includes an overall Service Score, that indicates overall level of care, supervision, or training required
Inventory for Client and Agency (ICAP) Problem Behavior Scales[a]	Children and adults	Precisely measures adaptive behavior and problem behaviors in three maladaptive clusters: (1) internalized (self-directed); (2) externalized (directed at others); and (3) asocial (within a social context)
Brief Index of Adaptive Behavior	Ages 5–17	Inventory consisting of 39 items for assessment of three domains: Independent Function, Socialization, and Communication. Useful as a screen for possible behavior disorders and neuropsychological impairment
Scales of Independent Behavior, Revised (SIB-R)	Ages 0–80	Measures functional independence and adaptive functioning in school, home, employment, and community settings; identifies internalized, externalized, and asocial maladaptive behaviors. Also generates Support Score to predict level of support individual will require based on impact of maladaptive behaviors on adaptive functioning
Social Skills Rating Scale (SSRS)	Ages 6–18	Provides detailed analysis of positive and negative behaviors according to three scales: social skills (cooperation, assertion, responsibility, empathy, self-control), problem behaviors (external, internal, hyperactivity), and academic competence
Balthazar Scales of Adaptive Behavior	Ages 5–57	Designed to measure self-care abilities: identifies weaknesses in eating, dressing, and toileting skills. Useful for giving appropriate training or treatment for profoundly and severely mentally retarded individuals
Adaptive Behavior Scale-Residential and Community: 2nd edition (ABS-RC:2)	Ages 18–79	Rates adaptive behavior as measurement of personal routines, interpersonal behavior, and social responsibility. Part I measures personal independence and important coping skills for daily living; Part II measures social behavior and assesses presence of personality and behavioral disorders

[a]McGrew KS, Bruininks RH, Thurlow ML (1992) Relationship between measures of adaptive functioning and community adjustment for adults with mental retardation. *Exceptional Children* 58: 517–529.

troubles may herald a familiar profile of a causal condition that influenced the examinee from early on.

Malingering

The incidence of malingering in correctional settings is as high as 50%, and in the setting of more serious charges this figure may be much higher. The adversarial proceeding lends itself to different forms of malingering. This reality forces the forensic examiner to account for this possibility in assessing history, conducting examinations, and in reviewing the work of others.

Faked intellectual deficiency may be difficult to test for. While certain tests – such as the Test of Memory Malingering, Wechsler Memory Scale, Fifteen-item test, Victoria Symptom Validity Test, and forced-choice tests – may reveal a poor effort by the examinee, or even malingering, efforts to downplay intelligence may go unnoticed even on standardized psychological testing, particularly in an examinee who has been coached.

A number of factors can cause someone to perform more poorly on intelligence testing. Fatigue, failure to understand instructions, peripheral neurological difficulties, anxiety, depression, pain, psychosis, antagonism toward the examiner, age, and ethnic and cultural background, and malingering, have all been noted as contributing.

Intellectual test results do not worsen over the course of development from youth to adulthood, and if test results do not improve, they should be expected to remain the same, given the range allowed for margin of error. Test results that worsen from administration in youth should be regarded with suspicion of malingering, either by the defendant or by the examiner administering the tests.

History remains the most important factor in demonstrating the presence or absence of malingered mental retardation. Clear evidence of communication fluency that does not correspond with verbal intelligence testing performance, for example, reflects faking or inadequate testing conditions.

Causes

Mental retardation originates from a variety of causes. Each of these conditions, be they congenital, perinatal, psychosocial, or illness, have a global impact on the growing central nervous system. As the brain develops mental and neurological networks even after birth, such broad-based deficits affect, depending on the condition, a variety of mental and physical abilities. Some conditions, such as fetal alcohol syndrome, more obviously impact mental abilities, and are also associated with learning disorders. Others, such as cerebral palsy, may cause profound neurological limitations but may relatively spare intellectual abilities.

In 30–40% of those diagnosed with mental retardation in clinical settings, no cause is identified, even after diagnostic workup. Likewise, learning disorders may not be associated with a particular cause (Table 3).

Ultimately, changes in the way nerve cells or neurons network together result in multiple and pervasive deficits in the individual's functioning.

Course

Onset

Mental retardation refers to below-average general intellectual functioning with typical onset in infancy or birth, that must occur prior to 18 years of age. A preponderance of those with mental retardation have comorbid mental disorders that are estimated to be three to four times greater than in the general population. There is nothing to suggest that the etiology of a given mental disorder is different in individuals who have mental retardation, however.

Progression

The cause and the severity of mental retardation are contingent upon the age and mode of onset of the disorder in the individual, although, as mentioned previously, symptoms must be present before the age of 18. Factors that may influence the course of mental retardation include, but are not limited to, the presence of underlying medical conditions and environmental considerations such as parental stimulation and access to educational opportunities.

Depending on the severity of the retardation and the extent of the faculties that the disorder impacts (as well as the availability of external resources), a diagnosis of mental retardation is not indicative of a lifelong condition. For example, an individual with mild retardation, diagnosed early in childhood, may not excel in an academia-related environment. However, with sufficient training and support, it is possible for the acquisition of adaptive living skills such that the individual no longer meets the degree of impairment necessary for a diagnosis of mental retardation.

Differential Diagnosis

Numerous circumstances, such as education, motivation, personality characteristics, social and vocational opportunities, other mental disorders, and general medical conditions that may coexist with mental retardation, influence adaptive functioning.

It is often difficult to diagnose accurately the presence of comorbid mental disorders, as the symptomatology may be impacted or marred by the severity of mental retardation and associated limitations. For example, deficits in verbal exchanges may result in an inaccurate history of the individual, given his/her inability to communicate a comprehensive history.

Individuals with learning and communication disorders may have otherwise normal intellect, impulse control, judgment, and function. Therefore, these persons would not be diagnosed with mental retardation.

Individuals with autism, communication disorder, and Asperger's syndrome are not necessarily retarded. The developmental problems of these conditions contribute to a person's social awkwardness, even ineptitude. However, intelligence testing may demonstrate them to be quite capable.

Learning disorders may affect academic performance from early in scholastic life. However, these learning disorders do not necessarily mean that a person has retardation. The overlap of diagnostic criteria for learning disorders, as well as autism, Asperger's, and other developmental disorders, mandates strict attention to criteria in assessing and diagnosing mental retardation.

A history of scholastic problems may be accompanied by behavioral problems of attention deficit hyperactivity disorder or oppositional defiant disorder. Careful history-taking delineates whether retardation coexisted with these conditions, or whether the diagnoses caused scholastic problems to a severe degree. As these diagnoses may dissipate by late adolescence, evidence for behavior evolution must be carefully tracked as the defendant's history moves into adulthood.

Furthermore, attention deficit hyperactivity disorder and oppositional defiant disorder often graduate into antisocial personality disorder and narcissistic personality disorder, respectively. Diagnostic examination, when these conditions are present in youth, must probe whether such an evolution has transpired in adulthood, or more dramatically, if the defendant evolved into a psychopath.

Depression and anxiety often present with behavioral problems and poor academic performance in school. In such cases, functional impairment may not be persistent, though chronic depression may obscure the nature of the diagnosis, as depression often presents differently in children and adolescents.

Courts may confront individuals who suffered brain injuries from trauma early in life, causing significant intellectual deterioration, including memory problems, but who are otherwise functionally intact. Head trauma, if it is sufficiently severe, will cause a remarkable loss of intellect, and possibly affect other functional domains. The history of changes is more abrupt. These individuals would be diagnosed with dementia. If all the criteria for mental retardation are present, mental retardation would be diagnosed.

A diagnosis of mental retardation should be made whenever the diagnostic criteria are met, even in the presence of another disorder, unless testing for intelligence is substantially affected by the psychosis or intoxication of an examinee.

Deficits in judgment and impulse control may be especially magnified in those who experience other acute conditions, such as intoxication and psychosis. Mental retardation can be diagnosed with other such related diagnoses, such as schizophrenia and alcohol dependence, if testing is performed under conditions that would not be directly influenced by the conditions themselves.

For example, if a person with schizophrenia who was not otherwise psychotic performed exceptionally poorly on intelligence testing, and on impulse control assessment, both diagnoses would be present. Likewise, a person with alcoholism who displays no impulse control problems and less impaired intellect when sober does not meet the criteria for mental retardation.

Even a diagnosis of retardation does not preclude the possibility that criminal behavior may be driven by drug abuse. A history needs to be gathered as to the defendant's use of drugs, their effect on his/her behavior, patterns of abuse, and whether this is done in groups, alone, or otherwise. If toxicology testing – which should be done at the time of arrest for any defendant who is suspected of a mental abnormality – reveals some illicit or prescription substance that affects behavior, the history will assist in the contextual understanding of the crime.

Ethnic, Gender, and Cultural Variations

Mental retardation cuts across the lines of racial, ethnic, educational, social, and economic backgrounds. It can occur in any family. Measures should be taken to ensure that intelligence-testing procedures, as well as adaptive functioning testing procedures, adequately recognize the individual's ethnic, cultural, or linguistic background.

The prevalence of mental retardation due to known biological factors is similar among children of upper and lower socioeconomic classes. Certain etiological factors are linked to lower socioeconomic status. When the etiology is unknown, and no specific biological causation can be identified, the mental retardation is usually milder and individuals from lower socioeconomic classes are overrepresented. The causal relationship between adequacy of parenting, environment, and mental retardation draws support from this trend.

Case Considerations

Interviewing

Unique challenges confront the forensic interviewer of the mentally retarded. Sensitivity must be heightened

Table 3 Conditions that cause mental retardation

Condition	*Associated symptoms*	*Medical diagnostic tests*	*Prognosis*
Normal genetic variation	None: normal health, physical ability, appearance		Mild intellectual impairment unlikely to affect capacity to function
Fragile X syndrome	Learning disorders; hyperactivity; anxiety; unstable mood; autistic-like behaviors; long face; flat feet; seizures	DNA-based blood test reveals X-chromosome abnormality	No cure; medication available to treat symptoms
Fukutin related-protein (FKRP) gene mutation	Congenital muscular dystrophy; cerebellar cysts	DNA-based test indicates chromosomal mutation on chromosome 19q13.3	Severe cases will have severe impairment; mild mutations have favorable long-term outcome
Lesch-Nyhan syndrome (typically males only)	Compulsive self-mutilating behavior; head-banging; joint swelling; dysphagia; impaired kidney function; athetosis; chorea	Prenatal chorionic biopsy reveals deficiency of the enzyme hypoxanthine guanine phosphoribosyl transferase (HPRT)	Poor: no treatment for neurological defects; build-up of uric acid in body may be fatal; some require restraints and intensive supervision
Tuberous sclerosis complex (TSC)	Skin and central nervous system lesions; tumor growth; seizures	Brain MRI, CT scan, renal ultrasound, ECG, eye exam, and Wood's lamp evaluation of the skin	No cure; however, most patients will live normal life span
Down syndrome	Low muscle tone; distinguishing physical features; enlarged tongue; heart defects; hypothyroidism; visual and gastrointestinal problems	Triple screen and alpha-fetoprotein blood tests in combination with ultrasound; chorionic villus sampling (CVS); amniocentesis; percutaneous umbilical blood sampling (PUBS); karyotype	No cure; however, mental retardation is typically within mild to moderate range
Klinefelter syndrome (males)	Stunted genital development; abnormal body proportions; personality impairment	Rectal exam shows enlarged prostate; karyotype shows 47 chromosomes in each cell instead of normal 46; semen exam shows low sperm count and decreased serum testosterone level	No cure; symptoms can be treated
William's syndrome	Abnormal facial features; frequent heart problems	Elevated serum calcium; X-ray of the chest or ECG shows heart abnormalities	Varies: some will be able to master self-help skills; others require lifelong intensive supervision
Prader–Willi syndrome	Low muscle tone; incomplete sexual development; problem behaviors; chronic feeling of hunger resulting in life-threatening obesity	Specialized genetic testing on a blood sample	Require lifelong diet supervision and obesity prevention to insure normal life span
Tay–Sachs disease	Loss of muscle tone and motor skills; exaggerated response to sudden noises; vision and hearing problems	Prenatal: amniocentesis or CVS indicates abnormal gene After birth: blood test	Classic infantile Tay–Sachs is fatal; long-term prognosis for adults is unknown
Cretinism	Dwarfism; body disfigurement; skin defects; motor and speech impairment	Blood test shows lack of thyroid hormone	Treated with thyroid extract and iodine intake; growth and mental facility will improve
Turner syndrome (females)	Webbed physical features; lack of ovarian development; cardiovascular, kidney, and thyroid problems	Karyotype indicates complete or partial absence of one of the two X chromosomes	No cure; growth hormone and estrogen replacement therapy improve symptoms

Cerebral palsy	Epilepsy, learning disorders, and various neurological problems	MRI and CT scan may indicate hydrocephalus; diagnosis primarily based on developmental delays as well as muscle tone, movement, and reflex abnormalities	Despite significant neurological limitations, intellectual capacity remains relatively intact
Cardiofaciocutaneous (CFC) syndrome	Physical abnormalities; skin discoloration; cardiac defects	No current laboratory test; diagnosis relies on clinician's observations	No cure; treatment varies
Phenylketonuria (PKU)	Skin and gastrointestinal problems; unusual behavior; delayed growth; frequent seizures	Blood test revealing high levels of phenylalanine; almost all states require newborn testing within a few days of birth	Requires careful diet monitoring from onset; patients lead normal life
Congenital muscular dystrophy (CMD)	Muscle weakness; joint deformity; hypotonia; delayed motor development	Blood test for high levels of muscle enzyme creatine kinase (CK); muscle biopsy reveals muscle fiber size variation; electromyography (EMG) shows unusual activity	No cure; treatment aimed at preventing complications
Congenital hypothyroidism	Jaundice; body-shape abnormalities; respiratory distress; slowed mental development	Blood test revealing lack of effective thyroid hormone	Some forms only temporary; treated with thyroid hormone
Prenatal toxins: maternal consumption (drugs/alcohol; smoking) and infection (toxoplasmosis, cytomegalovirus, rubella, syphilis, human immunodeficiency virus (HIV))			
Fetal acohol syndrome (FAS)	Facial abnormalities; growth deficiency; central nervous system dysfunction; neurological deficits and learning disorders	Abnormal levels as indicated on blood test	Poor; 82% of patients will not be able to live independently
Fetal malnutrition	Prematurity; low birth weight; ''failure to thrive'' conditions at birth		Poor; those who survive will have lasting impairments
Cerebral hypoxia (oxygen deprivation)	Inattentiveness; poor judgment; memory loss; impaired motor coordination	PET scan indicates lack of oxygen in cerebral blood flow	Worse the longer brain has been deprived of oxygen: During recovery, psychological and neurological abnormalities such as amnesia, personality regression, hallucinations, memory loss, and muscle spasms and twitches may appear, persist, and then resolve
Head trauma	Headaches, visual and neurological problems	Damage is indicated on CT scan, MRI, or other imaging techniques	Varies; depends on severity of injury
Lead/mercury poisoning	Muscular, gastrointestinal, and visual problems; convulsions; agitation; hallucinations; other nervous system abnormalities and learning disorders	Blood chemistry test indicates toxic levels	Treatment is effective; however, chronic exposure may be fatal
Childhood diseases: whooping cough, chickenpox, encephalitis, measles, hepatitis B			
Environmental stressors: poverty, inadequate healthcare and education			

MRI, magnetic resonance imaging; CT, computed tomography; ECG, electrocardiogram; PET, positron emission tomography.

to nonverbal cues in poor communicators. Jocularity and condescension should be avoided. At the same time, questions should be carefully phrased so that the examinee understands the question enough to answer it.

The interviewee's responses may be difficult to understand; alternatively, the examinee may respond so as to please the interviewer, particularly if there is a more pronounced status difference between interviewer and examinee. Interviewers must be careful to avoid overdirecting the interview; furthermore, the examinee may reflect answers to a response set, rather than open-ended information that is more objective to the forensic interview.

Response bias, particularly in the acquiescent, can be reduced by substituting either/or questions for yes/no questions, especially if accompanied by picture representations of each choice.

Death Investigation

Suicide in the mentally retarded is more frequent in the mildly retarded compared to the severely retarded. However, research on those affected with Down syndrome demonstrated suicidality to be less frequent among the handicapped, compared to an unaffected group. Only nonverbal learning disability has shown any association with suicidality.

The mental health history of the decedent must therefore be considered in any death investigation. While depression may be chronicled in a retarded individual, other psychiatric diagnoses often go undiagnosed. Therefore, special consideration should be taken to gather a history for symptoms such as hopelessness, self-endangerment, or self-mutilation, or other suggestion of progenitors to successful suicide.

Given the functional problems of the retarded, their higher risk for accidents leaves them vulnerable to unexpected and unanticipated death. Evidence from the scene of the investigation will yield additional details as to the likelihood of error or uncoordination in contributing to the decedent's demise.

The retarded are often victimized. Homicide by strangers may involve bullies or other antisocial predators who recognize the retarded individual as a patsy who is easily overcome, as an outlet to discharge anger. As the retarded are unlikely to be very profitable robbery victims, robbery–homicide is more likely to relate to drug-seeking behavior that targets the most readily available victim, or adolescent perpetrators who risk the legal consequences of homicide for even small amounts of money.

Likewise, the retarded may be victimized by overwhelmed or abusive family members, or by live-in significant others who displace antagonistic feelings.

The retarded may be sexually victimized as well. Death under such circumstances does not preclude other motives or likely perpetrators. Such perpetrators may themselves be retarded.

Evidence, from crime investigation, of a sophisticated *modus operandi* reflects on the intellect of the actor. However, a perpetrator may perform poorly on intelligence testing and still show an elaborate and devious methodology and plan to homicide. The more clearly intellectually limited a perpetrator is, the more likely it is that his/her role in a carefully planned or elaborately orchestrated crime was more confined, or as an accessory who followed the instigation of a less intellectually limited prime mover.

Victimization and Aggression

Rates of violence perpetrated on people with mental retardation are higher than those against the rest of the population. Few are reported to the authorities, and retarded complainants may not inspire a sense of credibility among the police, who may then choose not to investigate or prosecute their complaints.

More aggressive and confrontational tendencies are associated with victimization, as well as more acquiescent personalities. Indeed, many perpetrators have also been victimized. Interpersonal training may decrease vulnerability to victimization, independent of environmental factors.

Medications targeting aggression, and the underlying psychological illness responsible for it, are effective in the mentally retarded. Anger-management programs have demonstrable efficacy in reducing long-term violence potential in the mentally handicapped.

Sexuality and Expression

Given emerging sensitivity to the exploitation of the retarded, it may be difficult to balance protection of the retarded with an appreciation for their sexuality.

Denying the sexuality of the retarded is passé. Sterilization is out of favor. However, what is maturation, for purposes to give informed consent, in someone whose "mental age" is widely considered to be as a child?

Sex education facilitates an appreciation of the significance of sexual relations, informed consent, sexual hygiene, and conscientious contraception. Even the retarded sex offender is best rehabilitated by sex education, especially in adolescents.

Miranda and Interrogation Issues

A suspect's Miranda rights in US courts require police to advise suspects, prior to interrogation, that they have a right to remain silent, to an attorney, and that

whatever they disclose in an interrogation can and will be used against them in court. Poor intellect alone does not *per se* reflect incompetence to waive Miranda rights. However, since waiving Miranda requires a "knowing" and "intelligent" waiver, mental retardation warrants careful consideration of the defendant's unique awareness.

Competency in the Miranda setting, as well as questions that probe false confessions, requires contextual relevance, and a specific accounting of a defendant's strengths and weaknesses. A diagnosis of retardation, even a noticeably reduced IQ score, does not necessarily deprive the defendant of competence to waive Miranda such that a diligent history need not be performed.

Clearly, a retarded suspect with communication problems may be unable to waive Miranda rights. An illiterate defendant would have to be engaged orally by detectives, who would need to carefully explain these rights and the ramifications of waiving them.

Even then, the impaired anticipation of consequences in a retarded suspect may have to be uniquely accounted for. Unless familiar with the system, suspects may not recognize the possibility that they will have to answer for charges made against them in a court of law. For this reason, the examination of statements and the circumstances of their being provided requires review of how well Miranda rights are explained.

The British have instituted changes in how the retarded are questioned. This reflects research that has demonstrated how the retarded are generally more suggestible, or moved into accepting scenarios of self-incrimination, by questioning interrogators. US courts have also acknowledged and accounted for the importance of suggestibility and compliance of the retarded suspect.

The latter vulnerability, particularly notable to the retarded, may lead to false acceptance of responsibility, or false confessions. So, too, may the retarded suspect's compliance with interrogators who demand an admission of guilt during questioning.

History on the circumstances of the questioning, which should be accompanied by a complete videotaped record of the proceedings, should be obtained to appraise the confessions of the retarded. These sources of information are best appreciated with a full understanding of the defendant's unique way of relating to authority, and how that style compared to the dynamics present in the interrogation setting.

Competency to Stand Trial

The skills required for such competency include controlling behavior in the courtroom setting, aspects relating to the ability to communicate with counsel, assisting with the planning of a defense, and understanding the roles of the different functionaries and trial procedure. Under most circumstances, defendants are not expected to direct their case.

However, as many cases result in plea negotiations, the defendant's understanding of the ramifications of the plea he/she is accepting may be difficult to determine. The threshold for a finding of competency is typically afforded a higher threshold by examining clinicians when the case is particularly complex, or charges are severe.

The Competency Assessment for Standing Trial for Defendants with Mental Retardation (CAST-MR) is a 50-item inventory, arranged in three sections of multiple-choice and open-ended questions. It enables a standardized competency examination to be carried out with the simple communication needed for special populations.

For a defendant found not competent to proceed, education may assist in complete and essential awareness of the court functionaries and their behavior. The most difficult obstacle to overcome may be the defendant's lack of competency to assist in the planning of his/her case; the ambiguous possibilities of such claims, however, warrant a demonstration of how that limitation is interfering with the attorney–client relationship.

Behavior can also be remedied to become more contained in the courtroom setting, and within a relatively short period of time. Medications for impulse control do not necessarily require many weeks to exert sufficient effect to restore competency. Antipsychotics, similarly, can restore competency within weeks, unless the defendant is exceptionally resistant to them.

Competency to Proceed *Pro Se*

While the same set of skills for competency to plea are required as for competency to stand trial, one would be hard-pressed to find a situation where a truly retarded defendant could intelligently represent him/herself.

Competency to Plea

An otherwise retarded defendant may still be competent to accept a plea. Accepting a plea offer may reflect acquiescence or compliance by the defendant, and a full appreciation of what will happen once the plea is accepted may be absent. Therefore, when there is evidence for retardation, care should be made to ensure competency to accept a plea.

Mens Rea

Individuals with functional and adaptive problems and poor performance on standardized testing may nevertheless form quite criminal intent. The retarded, particularly the mildly mentally retarded, make a variety of choices about their lives without great difficulty, and therefore can make such choices relative to criminal actions.

Mens rea is a particularly complex issue in the retarded that does not necessarily correspond to the level of functional impairment, or performance on intelligence testing. The history of a defendant's typical behavior is a more likely guide to resolve these questions.

Crimes that reflect a pattern of the defendant's stealth and concealment, as well as premeditation, demonstrate clear *mens rea*. This issue is less certain when crimes follow impulsive decisions, particularly so when the crimes parallel fairly common behavior by the defendant.

Stalking is a crime that may naturally originate from a retarded person's poor social sensitivity. While some unwanted and persistent annoyances are threatening and menacing, others are simply repeated efforts to maintain contact in the face of rejection or emotional dependence.

Shoplifting may result from kleptomania or other poor impulse control and hoarding that sometimes complicates the behavioral presentation of the retarded.

Likewise, unprovoked minor assaults or destruction of property are commonly described in the more severely mentally retarded. An offended or aggrieved victim may pursue criminal charges; under these circumstances, the defendant's capacity for *mens rea* would require closer study.

History is helpful in this regard. Parents, peers, school officials, and treatment records give additional insight into whether in the past the defendant was one to exhibit proactive or predatory violence – or reactive violence in response to provocation.

Such history should also ascertain the customary settings for such violent behavior, as well as any secondary gain that the defendant may have realized from previous violence. This information better distinguishes whether the defendant is given to engaging in violence in group or solitary settings.

Many of the moderately retarded, and particularly the severely retarded, have a poorly developed sense of boundaries, and sexual interest and curiosity may violate the integrity of another. Sex offenses, particularly those committed in full view of others, warrant closer examination as to the defendant's intent (Table 4).

Table 4 Complicating factors impacting *mens rea* in the mentally retarded

Pattern of stealth and concealment
Premeditation
Realization of secondary gain
Crimes as result of poor social sensitivity and emotional dependence (example: stalking)
Crimes as result of poor impulse control (example: shoplifting)
Crimes as result of poorly developed sense of boundaries
History of violent behavior and unprovoked aggression
Capacity to distinguish right from wrong

In certain instances, the retarded defendant may reflect a clear lack of understanding of the criminality of his/her conduct. However, in other cases, that understanding is as clear as for a person who performs much better on intelligence testing. The question can only be resolved by careful history-gathering that reflects on the choices made – and those opted against – by the defendant, before the crime.

The mere history that a person is institutionalized, or lacks an obvious motive, does not preclude the possibility that the defendant could form *mens rea*. Apart from a careful accounting of the crime, the *mens rea* question is best resolved with history from progress notes on what problem behaviors the defendant had been counseled on in the past, and what degree of understanding he/she had demonstrated. In spite of a defendant having been counseled on such problem behaviors, even repeatedly, the instant offense may reflect his/her acting out when angry or otherwise unsettled.

Moral Decision-Making and Appreciation of Wrong

While brain and neurological development is impaired in the retarded, decision-making and moral judgment demonstrate significant impairment primarily in those who are moderately to severely retarded. Even then, many with intelligence testing consistent with moderate retardation have adequate moral development to recognize right from wrong. Hence, they live their lives with little need for supervision or institutional placement.

Moral maturity and cognitive reasoning relate more directly to each other rather than to mental age. Ultimately, focusing an assessment on these areas provides greatest insight into the moral capabilities of a defendant.

At the same time, psychotic disorders are underdiagnosed in the retarded. A careful history must also address the possibility that the defendant has a major psychiatric disorder on top of retardation. An

additional, or dual diagnosis, may account for why a person with retardation, who would have a well-established ability to appreciate wrong, could be affected by an acute psychotic condition, such as schizophrenia, bipolar disorder, or psychotic depression. Such a major mental illness would affect the defendant's moral decision-making in the same way it does anyone else with those conditions.

Remorse

Remorse is a potentially misleading concept in the retarded. While they may experience unimpaired regret and remorse, disturbances in communication or social skills may impede a clear expression of remorse. A defendant's capabilities are best distinguished by gathering an adequate history of moral development, including expression of remorse, from caregivers, parents, or other close acquaintances. This includes a history of the behaviors for which he/she expresses remorse, and how this is expressed.

Ability to Conform Conduct

Impulse control problems are common in the retarded. Not surprisingly, a number of crimes may occur because of the defendant's inability to conform conduct. However, even those with impulse control problems may retain a substantial capacity to conform their conduct to the requirements of the law.

As with other aspects of forensic examination, it is best to answer these questions on a case-by-case basis. An assessment of a particular crime should also examine the history of the defendant's behavior, his/her history of impulse control problems, the circumstances under which he/she demonstrated such impulse control problems, how they manifested themselves, whether he/she was receiving treatment for them, and whether that treatment was successful.

Appreciation of Consequences of Actions

Poor judgment is a manifestation of limited intelligence, and may contribute to a viable diagnosis of retardation. The defendant's capabilities, however, need to be distinguished from a momentary bad decision or bad judgment *per se* because the actions were criminal. The retarded defendant's poor adaptive skills include impairment in the capacity to foresee the full extent of the consequences of his/her actions. This may be the case even when the defendant is fully aware of the nature of what he/she was doing.

Appreciation of the nature and consequences of actions, such as it is applied in the insanity defense, does not require that the defendant foresee all of the potential consequences. The extent of the defendant's understanding is best examined through observations of other witnesses before, during, and immediately after the crime, including witnesses to the defendant's comments and statements. Therefore, impaired intelligence and functional adaptation, consistent with a diagnosis of retardation, is not a *per se* basis to presume that the defendant lacks the capacity to appreciate the consequences of his/her actions.

Nevertheless, those with severe deficits in adaptive functions and particularly low intelligence testing scores are more likely to lack such capacity. Testing scores and other adaptive problems, however, do not eliminate the need to review the defendant's history pertinent to the time around the crime.

Prognosis and Future Risk

A person whose retardation was responsible for a crime, either because of impulse control or poor socialization, may or may not continue to demonstrate the same deficits later in life. While retardation is a developmental disorder that does not reverse, individuals with retardation may progress through education. Training and other strategies may be successful in reducing the degree, or number, of functional and adaptive problems.

Nevertheless, the retarded are capable of having antisocial personality features. Under these circumstances, retardation will particularly complicate the expression of antisocial personality disorder, whose symptoms will be particularly difficult to treat. By reviewing the history of the crime and ascertaining the thoughts and motivations behind it, an examiner may be able to delineate the relevance of retardation versus antisocial personality as the prime mover of the crime or the decision to choose criminality.

When crimes are a direct product of retardation, the prognosis is directly affected by the residential arrangements for the defendant's disposition, their suitability for a person of his/her behavior, or medicines that a defendant may be prescribed.

Unlike defendants who recover from illnesses, the retarded defendant will represent a risk when conditions present at the time of the instant offense repeat themselves. Therefore, the supervising institution should account for future risk in its treatment planning – both in the training programs devised for the defendant as well as the level of supervision the defendant receives.

Mitigation at Sentencing

Mental retardation has been acknowledged as a mitigating factor in capital-eligible cases. The US Supreme Court has ruled in Atkins that the mentally

retarded cannot be executed, while assigning responsibility to states to define "retardation" for purposes of capital eligibility.

Given the range of crimes that have not been included in the Atkins ruling, retardation may have a significant impact on the defendant's participation in crime and be appropriately mitigating.

A crime may reflect the retardation of the defendant. Impulsivity may be demonstrated in shoplifting, vandalism, ringing fire alarms, assault – even sexual offenses, and murder.

Poor judgment may also be reflected in the perpetrator's actions. Bad judgment is best reflected in unnecessary crimes, crimes that would obviously result in capture, crimes with bumbling *modus operandi*, for example.

Other aspects of retardation, such as adaptive or intellectual difficulties, may have very little relevance to crimes, and when present, should not be considered as contributing to the mitigating influence *per se* of retardation.

Like other conditions, mental retardation may have a mitigating impact on a crime, as it is indeed a significant illness, but like significant diseases such as pancreatic cancer, it may have little relevance to criminogenic decision-making. Resolving the relevance of a diagnosis of mental retardation to mitigation requires a careful review of the defendant's actions before, during, and after the crime.

Employment Considerations

Accommodation and the Americans with Disabilities Act The Americans with Disabilities Act affords promising protections to those with mental retardation and, in particular, the learning-disabled. With many fairly simple positions very much within the range of capabilities of the retarded, the Americans with Disabilities Act allows that if a person can perform the essential functions of his/her position, an employer must make reasonable accommodations for the disability.

While learning disorders often disappear by adulthood, the potentials that accompany the limitations of the learning-disordered expand the possibilities for their employability.

Adaptation to learning disorders earlier in life may be complicated, however, and the learning-disordered are often hampered by personality problems, even disorders, that originated from coping strategies they developed during earlier scholastic underachievement.

Since the Americans with Disabilities Act does not protect the entitled malcontent, forensic disputes may well arise in employees with personality problems independent of any learning disorder, who claim disability on the basis of school performance in their youth. The nuances of such cases are reflected in an employer's desire to rid him/herself of a foul employee – not one who is making spelling, mathematics, or reading errors.

The retarded endure conditions, long before they reach the workplace, that engender in them a sense that they are less entitled. Typically, the retarded are not at all litigious, and their low sophistication limits their awareness of legal rights. Complaints on their behalf, therefore, more likely originate from aggrieved family members, if at all. Retarded employees who are unaware of their legal protections are less likely to externalize responsibility to the employer when conveying reasons for an unlawful dismissal.

Discrimination and harassment The same natural forces that engender silence among the retarded indeed manifest themselves in hostile work environments. A naturally diminished self-esteem, and a lack of confidence relative to other employees, interferes with the mentally retarded employee's acknowledgment that even if he/she has been victimized and bullied at other times, such treatment at the workplace is unacceptable.

One legacy of harassment and discrimination complaints is that they are brought by individuals who are combative, determined, and sophisticated enough to recognize, and then respond legally, to discrimination. Given the qualities of the mentally retarded, the most likely vehicle for protecting their rights may indeed be their parents or guardians.

The learning-disordered are not affected intellectually, and may be painfully sensitive – in the opposite direction – to the treatment they get from others at the workplace. An economy that affords fewer jobs, downsizing, and decisions of whom to lay off that seem arbitrary may give rise or inspire scrutiny as to whether an employment action was motivated by discrimination.

Parental Rights

No anticipated reproductive problems necessarily accompany retardation. However, the ability of a retarded mother to parent her child adequately may be in question. Maternal mental retardation is associated with an increased risk of child abuse and neglect. Neglect complaints are particularly overrepresented. Because of their retardation, parents are unable to utilize community resources properly, even as agencies make them available. Retarded parents are often characterized as dependent on others, who may even victimize them. As they may not be able to

drive or to make change, and may have unrealistic expectations of their child's development, in a crisis setting, they may destabilize further.

Love, and the capacity to love, is unrelated to retardation *per se*. Given the range of abilities and limitations that a retarded person may possess, the capacity to learn may prove to be the rate-limiting factor in demonstrating whether education can overcome his/her other shortcomings. Better outcomes may be enabled by the presence of a normal functioning adult who is able to provide extended daily support to the retarded adults and their children. Worse outcomes may arise if a child who is already at risk from a genetic standpoint for retardation faces a higher risk from environmental neglect as well.

The moderately retarded, and those more severely impaired, may be encumbered with insurmountable limitations that keep them from mastering their own routines, let alone those of their children. Foster care has been shown to improve the emotional condition of depressed and functionally deteriorating children of the retarded. Older children of the retarded may project a pseudomaturity, endeavoring to care for both parents and younger siblings.

See Also

Forensic Psychiatry and Forensic Psychology: Personality Disorder; Multiple Personality Disorder; Stalking; Criminal Responsibility

Further Reading

Abramson PR, Parker T, Weisberg SR (1988) Sexual expression of mentally retarded people: educational and legal implications. *American Journal on Mental Retardation* 93: 328–334.

American Psychological Association (2000) *Diagnostic, Statistical Manual of Mental Disorders DSM-IV-TR*. Washington, DC: American Psychological Association.

Atkins v. *Virginia* (2002) 260 Va. 375, 534 S. E. 2d 312.

Day K (1988) A hospital-based treatment programme for male mentally handicapped offenders. *British Journal of Psychiatry* 153: 635–644.

Day K (1993) Crime and mental retardation: a review. In: Howells K, Hollin CR (eds.) *Clinical Approaches to the Mentally Disordered Offender,* pp. 111–144. London: Wiley.

Duckworth MS, Radhakrishnan G, Nolan ME, Frasier WI (1993) Initial encounters between people with a mild mental handicap and psychiatrists: an investigation of a method of evaluating interview skills. *Journal of Intellectual Disability Research* 37: 263–276.

Fletcher RJ, Dosen A (1993) *Mental Health Aspects of Mental Retardation: Progress in Assessment and Treatment*. New York: Lexington Books.

In re: Lora Faye Wirsing, Developmental Disabled Person (1998) 456 Mich. 467; 573 N.W.2d 51.

Jacobsen JW (1990) Do some mental disorders occur less frequently among persons with mental retardation? *American Journal on Mental Retardation* 94: 596–602.

Kennedy CH, Niederbuhl J (2000) Establishing criteria for sexual consent capacity. *American Journal on Mental Retardation* 106: 503–510.

Lindsay WR, Allan R, MacLeod F, Smart N, Smith AHW (2003) Long-term treatment and management of violent tendencies of men with intellectual disabilities convicted of assault. *Mental Retardation* 41: 47–56.

Petersilia JR (2001) Crime victims with developmental disabilities: a review essay. *Criminal Justice and Behavior* 28: 655–694.

Santamour M, West B (1977) *Mentally Retarded Offender and Corrections*. Washington, DC: US Department of Justice, National Institute of Law Enforcement and Criminal Justice Law.

Stephens B (1974) Symposium: developmental gains in the reasoning, moral judgment, and moral conduct of retarded and nonretarded persons. *American Journal of Mental Deficiency* 79: 113–115.

Drug and Alcohol Addiction

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Introduction

Addiction originates from a Latin word, which describes debtors, who are in effect slaves to their creditors. In a similar derivative manner, dependence implies a condition of being beholden or subordinate. This article examines how substance use and its problems relate to a forensic setting. In conceptualizing addiction, three models are used. The first is the disease model, in which by using symptoms and signs, a diagnosis is made and treatment commenced. Alcoholics Anonymous (AA) uses this as the wellspring of its approach and philosophy. Second, the socioeconomic model places substance misuse in the context of the social environment to which individuals belong. Factors from this environment direct the individual to substance misuse. This model has greatly influenced the temperance movement. Finally, substance misuse can be viewed in terms of behavioral theory. Classical conditioning describes how the stimulus and the desire to use a substance lead to a response – the consumption of a substance for its

positive effects. The setting where the substance is consumed can then become associated with the substance. This leads to the setting itself becoming the stimulus to use independently of the desire to use. The setting acts as a cue to use. A cue can be a physical location, drug paraphernalia, company of friends, or experiencing the symptoms of stress. Operant conditioning explains how the effects of a substance encourage further use. The positive effects reward the user and so act as a positive reinforcer in that further use is encouraged. Withdrawal symptoms are unpleasant and are relieved by substance use. So, withdrawal symptoms act as a negative reinforcer as they encourage further substance use to alleviate their presence. Social learning theory suggests that when individuals observe the actions of others and their effects, they then copy what they have observed in order to obtain the same effect. The cognitive factors involved in this process, such as anticipation, planning, expectation, and self-efficacy, form the basis of cognitive behavioral therapy and relapse prevention.

Moving from these models explaining how it happens on to what is happening, the Epidemiological Catchment Area study gave lifetime prevalence for substance-related disorders for the general population of 16.7%, which shows the penetration of substance-related problems into society. This is even truer for the forensic and criminal justice settings, as substance misuse is the most common health problem encountered in these settings. Prevalence rates vary, but up to 50% of prisoners meet the criteria for alcohol or drug dependency. Over one-third of fatal road traffic accidents involve drugs or alcohol. Alcohol is a factor in over half of homicides and drugs in over one-third. There is no doubt as to the ubiquity of the malign influence of substances in people's lives.

Common Drugs of Abuse

The more common drugs of abuse can be grouped in various ways. Drugs of a group have similar effects, use the same biological mechanisms, have cross-tolerance, and display a similar pattern of withdrawal.

Opiates

Opiates can be opium-derived, such as morphine and codeine, semisynthetic, such as heroin, or synthetic, such as methadone. They all have a dependence potential and, although not fatal, have very unpleasant withdrawal symptoms.

General Depressants

This group contains alcohol, benzodiazepines, chloral, and paraldehyde. Withdrawal symptoms can be unpleasant and, in the case of alcohol, potentially fatal.

Stimulants

Stimulants can be plant-derived, e.g., cocaine and coffee, or manufactured, e.g., amphetamines and appetite suppressants. Withdrawal symptoms are less severe than in the case of opiates and general depressants.

Hallucinogens

These include lysergic acid diethylamide (LSD) and mescaline. There are no withdrawal symptoms, but withdrawal may cause prolonged "flashback" experiences.

Volatile Organic Substances

This group ranges from anesthetic gases and fluorinated hydrocarbons to petrol, toluene, butane, and amyl nitrite. Acute intoxication can cause death. There is usually no marked dependence or withdrawal.

Substances with Mixed Properties

These are substances whose effects cross group boundaries. Cannabis has depressant properties and idiosyncratic hallucinogenic properties at higher doses. Nicotine is both a stimulant and a depressive. Methylenedioxymethamphetamine (MDMA, ecstasy) is an amphetamine derivative with both stimulant and hallucinogenic properties.

Definitions

Various terms are used in the field of substance misuse, and it is useful to understand what each term implies. The following terms, with corresponding descriptions, apply to all substances, i.e., both drugs and alcohol.

- Substance use or abuse: this is the use of mind-altering chemicals, whether they are licit or illicit.
- Substance misuse: this is substance use that causes harm in some form.
- Substance-related problems: these are the full range of problems that can occur due to substance abuse:
  - problems affecting the user, but commonly others as well, e.g., the victim of a drunk driver
  - physical, psychological or social
  - disease processes due to substance abuse. These can be acute or chronic.
- Dependence: this is an interrelated cluster of cognitive, behavioral, and psychological symptoms. Psychological symptoms are listed below and were

originally described in the context of alcohol by Edwards and Gross, but apply to any substance:

- Increased tolerance: greater quantity of the drug is required for the same effect. This is caused by increased metabolic clearance.
- Repeated withdrawal symptoms: this implies that symptoms occur when the drug is withheld. The pattern of symptoms depends on the individual drug being used.
- Subjective awareness of compulsion to use: this compulsion or craving is a constant preoccupation with thoughts and feelings centered on the desire to take drugs.
- Salience of drug-seeking behavior over all other activities: the person gives highest priority to drug use, to the extent that negative social consequences do not deter use.
- Narrowing of the drug-taking repertoire: the person uses the drug in a rigid or stereotyped manner.
- Relief avoidance of withdrawal symptoms: the first use of the substance becomes earlier and earlier in the day, triggered by increasing severity of dependence and withdrawal symptoms.
- Reinstatement after abstinence: if the person abstains for a period and then resumes, the previous dependence is quickly reestablished.

- ICD-10: the features used in the International Classification of Diseases, tenth edition (ICD-10) are based on the above definitions and those used to make a diagnosis are listed in Table 1. The same harmful use or dependency criteria are used for each individual substance. Substance misusers often use more than one drug, so if the patient is dependent on more than one substance, the most important substance is classified first.
- Motivation: in terms of substance misuse, this is the willingness of the person to implement change. The degree of willingness is evident by the individual's behavior, which can be seen as a series of stages. A person who is contemplative realizes that there is the need for change and weighs up both sides. If he/she is active he/she will be modifying the problematic behavior. If a person is able to sustain change and modify as necessary, then he/she has the ability to maintain behavior change.

Table 1 International Classification of Diseases, 10th edition (ICD-10): diagnostic features

Harmful use
• Substance caused physical or mental use
Dependency syndrome
Three or more over the past year of the following:
• Compulsion to take the substance
• Escalation of amount used
• Withdrawal syndrome following reduction in use
• Tolerance
• Neglect of other activities in favor of substance use
• Persistent use despite evidence of harm

Table 2 Statistics of alcohol problems

Estimated prevalence rate for alcohol dependence syndrome:	
Men	75/100 000
Women	21/100 000
Estimated total mortality per year	5000–40 000
Road traffic accidents, casualties, 2002	20 140, 6% of total
UK National Health Service Admissions, 2002	
Alcohol as the primary diagnosis	28 100
Alcohol-related disorders	90 900

Statistics

Alcohol

In the UK, 96% of men and 86% of women drink. The average consumption per week is 16 units for men and 6.3 units for women. The recommended weekly intake is less than 21 units for men and less than 14 units for women. Twenty-seven percent of men and 14% of women exceed these recommended limits. For men this figure has remained static, but it has been increasing steadily for women. As older people tend to drink less, adjusting the figures gives 35% of men and 18% of women aged 16–24 who are exceeding safe drinking limits. In a previous week 37% of men and 21% of women binge-drank, that is, consumed over 4 units for men and over 3 units for women. Despite the 3.3% contribution of alcohol taxes to the UK government's tax revenues, this level of alcohol consumption is not without problems, as listed in Table 2.

Drugs

In the UK on average, 4 million people use drugs every year. Cannabis is the commonest illicit drug used; however, up to 1 million will have used a class A drug. There are between 100 000 and 250 000 problem drug users in the UK. These drug users are part of a market that is estimated to be £6.6 billion a year. The economic deficit to the country by drug use is estimated to be £4 billion a year. However, there is a huge discrepancy between the estimates of problem users and the number that present for treatment – 40 430 in 2000. This is an increase of 45% since 1995. Accurate statistics are essential in the understanding and treatment of substance problems. However, the statistics available are from a variety

Table 3 Drug use amongst general population, 2000 (British Crime Survey)

Ever used any drug	34%
Used a drug last year	11%
Used a drug last month	6%
Cannabis, ever used lifetime	27%
Cannabis, used last year	9%

Table 4 Drug use amongst 16–29-year-olds, 2000 (British Crime Survey)

Used a drug last year	24%
Cannabis, ever used lifetime	44%
Cannabis, used last year	22%
Class A, used last year	9%

Table 5 Drug use amongst those presenting for treatment 2001 (Annual Report on the UK Drug Situation)

Heroin as primary drug	64%
Ever injected	66%
Injected last week	45%
Mortality rate	1.2%
Human immunodeficiency virus (HIV)	0.8%
Hepatitis B virus	5.4%
Hepatitis C virus	29%

of sources and of variable quality and so give only a snapshot of the possible extent of the problem (Tables 3–5).

Screening

Screening is the recognition of hazardous alcohol or drug consumption. It can be asking simple, direct questions, using questions in a structured way, or the use of validated and reliable instruments. Essentially, a formal or informal checklist is used to enhance accurate history-taking. In general, the most reliable information will be about the last 24 h; more distant accounts are less reliable, but are required to establish the individual's longitudinal history of pattern of use. The usefulness of screening is that patients may not volunteer any information themselves, as they see their drug or alcohol use as recreational and not problematic, and so the evaluation process in itself can create insight and self-awareness.

Questionnaires

These request the patient to state the frequency of use of an individual drink or substance over a given period, e.g., a week or month, such as quantity frequency questionnaires. A diary format asks patients simply to write down what they used each day over a period, say, of a week. They are relatively time-consuming, but are reliable and give accurate information.

The Alcohol Use Disorder Identification Test (AUDIT) was developed by the World Health Organization. It asks a series of simple questions which are designed to pick up early signs of alcohol-related problems. It can be extended for a more thorough screening procedure. A five-item AUDIT is displayed in Table 6.

CAGE is a very simple and quick four-item questionnaire (Table 7), where two or more positive replies identify the problem drinker.

The Maudsley Addiction Profile (MAP) covers four areas: (1) substance use; (2) health risk behavior; (3) physical and psychological health; and (4) social functioning. It can be used at assessment and after a period of treatment. A modified version of the MAP is given in Table 8.

Assessment

In managing alcohol and drug problems, a detailed history is required to assess comprehensively the impact of use on physical, psychological, and social well-being. This assessment is the same irrespective of the presenting complaint, as otherwise valuable clinical information could be lost and also an opportunity to intervene in a substance-related problem. The use of screening tools and routine drug and alcohol testing is a valuable aid to this process. Guidelines relating to the substance use component of a psychiatric history are illustrated in Table 9.

Drug Testing

Chemical testing of biological fluids is the most objective means of diagnosis of drug use. The European Court of Human Rights stated that testing for substances in all forms is legal. However, the response to that test can be illegal, e.g., a longer period in prison. Testing is of no use if the sample is not what it is meant to be, so ideally the taking of any sample is supervised to prevent substitution or contamination. In general, substance levels are lower in hair or saliva compared to urine or blood. The standard method of detection is immunoassay followed by gas chromatography confirmation with mass spectrometry.

Urine Assessment

Urine is the biological tool of choice for detection of substance use and as such the most frequently used. Increasingly available are rapid detection devices (near-patient drug-testing devices) for initial

Table 6 Five-item Alcohol Use Disorder Identification Test (AUDIT)

Have you consumed *any* alcohol in the last 12 months? (please tick)	Yes	No

If *no*: do not continue
If *yes*: please answer the following questions

Please circle the appropriate answer and then record the points score for that item in the right-hand column. At the end of the section, add up the scores in the right-hand column and complete the total score box to determine the outcome

	Points per item					
	4	*3*	*2*	*1*	*0*	*Score*
How often do you have a drink that contains alcohol?	4+ times weekly	2–3 times weekly	2–4 times monthly	Monthly or less	Never	
How many drinks containing alcohol do you have on a typical day you are drinking?	10+ units	7–9 units	5 or 6 units	3 or 4 units	Never	
How often during the last year have you found that you were not able to stop drinking once you had started?	Daily or almost daily	Weekly	Monthly	Less than monthly	Never	
How often during the last year have you failed to do what is expected of you because of your drinking?	Daily or almost daily	Weekly	Monthly	Less than monthly	Never	
Has a relative/friend/doctor or health worker been concerned about your drinking or suggested you cut down?			Yes, during the last year	Yes, but not in the last year	No	
					Total score	
A score of more than 5 suggests problematic use that requires further investigation						
Outcome (please circle):					Negative	Positive

screening. However, as these devices are not as reliable as laboratory testing, any result should be confirmed. Table 10 shows the time periods of detection for drugs in urine – individual laboratories may differ on this.

Saliva Assessment

This sample can be obtained either by spitting or using a swab. To generate sufficient volume, sometimes citric acid crystals or chewing on an inert material is used before sampling. Saliva has great advantages over urine in that it is easy to collect and noninvasive. At the time of writing, this form of assessment is only being developed and so there is a lack of a pool of data to establish standards. The current techniques cannot then be said to give robust results. However, it is likely in the near future that this will change and saliva testing will be available for roadside testing and screening.

Hair Assessment

Again, like saliva testing, this form of testing is at the developmental stage. The interpretation of results is not fully understood as yet, as the age, anatomical site, ethnicity, and cosmetic treatment can all influence results. The drug metabolites are incorporated into the matrix of hair, so hair samples give a measure of long-term use. So, although it is much more expensive than urine testing, it does have an advantage in that this longer detection window gives an idea of the chronicity of the problem.

Table 7 CAGE questionnaire

1. Have you ever felt you should **c**ut down your drinking?
2. Have people **a**nnoyed you by criticizing your drinking?
3. Have you ever felt **g**uilty about your drinking?
4. Have you ever had a drink first thing in the morning as an ''**e**ye-opener''?

Blood Assessment

Blood testing remains the most accurate quantitative measurement. However, the means of obtaining a sample, the risks associated with blood, and the expenses involved limit greatly the use of this method. This is particularly apparent in the need for regular, rapid, on-site screening involving large numbers of samples. It is best suited for therapeutic drug monitoring, as in the case of methadone treatment.

Table 8 Low-threshold drug screen

Please read to the patient: In the last 12 months, how often have you used the following illicit substances or prescribed medications?		
Substance	*Use in the last 12 months*	
Cannabis		
Hallucinogens (LSD, ecstasy, mushrooms)		
Ketamine		
Amphetamines (speed)		
Cocaine powder		
Crack cocaine		
Heroin		
	Prescribed	*Nonprescribed*
Opioids (DF118, Temgesic, morphine, diamorphine, methadone)		
Codeine		
Procyclidine		
Other medications (e.g. asthma, steroids). Please specify name and dose:		
Benzodiazepines (Valium, temazepam, nitrazepam, mogadon)		
Score positive if the client reports having used at any time over the last year: 1. an illicit drug or 2. a prescribed substitute (methadone/DF118) or 3. a prescribed drug that is not prescribed to him/her		
Outcome (please circle)	*Negative*	*Positive*

Interventions

The treatment of drug dependence is a combination of pharmacotherapeutic and psychosocial interventions. The role of medication is fourfold. It can be used: (1) to alleviate withdrawal; (2) to detoxify; (3) as maintenance; and (4) to support abstinence. Psychosocial interventions are used as patients request this form of treatment; they improve the outcome of pharmacological treatments and are more effective than nonintervention. Most services combine these approaches, but there is more emphasis on psychosocial and briefer interventions in the alcohol field, where the pharmacotherapeutic options are more specific. Trials report the benefits of addiction treatment, but typically only 20% report abstinence over the past year and often there is a 50% dropout rate. However, this is consistent with a model of a chronic behavioral disorder. The evidence available on the efficacy of these interventions is very variable. This becomes important as when suggesting a treatment plan there must be confidence in its effectiveness, which can only be based on robust research.

Harm Reduction

The goal of substance misuse treatment is reduction of individual and public harm. The emergence of human immunodeficiency virus (HIV) necessitated this approach, as the spread of HIV is a greater danger than drug misuse. The aims are to reduce injecting, sharing, and drug use, to encourage safe sexual practices, and to reduce crime. Central to this approach are needle exchanges, education, particularly about safe injecting, viral screening with hepatitis B vaccination, and methadone maintenance. More recently, the need for patients to have education about resuscitation has also been appreciated, as opiate misusers have ten times the mortality of an age-matched general population. The success of this approach is shown by the National Treatment Outcome Research Study (NTORS), for example, for every £1 spent on treatment, £3 is saved on crime.

Treatment Retention

Retention of treatment is an important aspect, as the evidence shows that the longer the patient spends in treatment, the greater the gains and the greater the lifestyle changes. This gives more weight to maintenance treatment, as short interventions do not work for the more severely dependent.

Pharmacotherapy, Alcohol

Drugs used for withdrawal

Benzodiazepines Accompanied by vitamin supplements, benzodiazepines are used to manage alcohol withdrawal. Long-acting benzodiazepines, such as

Table 9 Substance use history

Reason for presentation
Current substance use
Use past 24 h
Use past month
Average use last 6 months
Longitudinal substance use
First ever use
Age of first use for each substance/age for regular use each substance
Age of dependent use each substance
Routes of drug use
Age regular weekend drinking/age regular evening drinking
Age regular lunchtime drinking/age early-morning drinking
Features of dependence
Withdrawal symptoms/delirium tremens
Periods of abstinence
Substance-related problems
Physical
Psychological
Social
Motivation
Coping capacity
Past stress, which caused relapse
Stages of behavioral change
Injecting history
First episode in detail/age first time injected
Duration of injecting/daily frequency of injecting
Injection sites and problems
Sharing/use of sterile injecting equipment
Knowledge about viral transmission
Risk of HIV/hepatitis viruses
Frequency of sharing/people shared with
Knowledge of cleaning equipment
Sexual risk-taking
Previous treatment history
General practitioner/specialist
Medication/maintenance/detoxification
Forensic history
Drinking and driving/drunk and disorderly
Prison sentences
Court cases/pending court cases
Present lifestyle
Marital/occupational/leisure
Social support/nonsubstance-using network

HIV, human immunodeficiency virus.

chlordiazepoxide, are used and for a limited period only. Chlormethiazole is also used, but only in an inpatient setting, as its use with alcohol can cause respiratory depression.

Drugs Used to Prevent Relapse

Alcohol-Sensitizing (Deterrent) Medications Disulfiram and citrated calcium carbimide act by inhibiting the action of aldehyde dehydrogenase. If alcohol is consumed then this causes the build-up of acetaldehyde, which causes an unpleasant systemic reaction.

Table 10 Period of detection in urine

Amphetamines	48 h
Methamphetamines	48 h
Benzodiazepines	
Therapeutic dose	3 days
Long-acting	7 days
Cocaine	2–3 days
Methadone	7–9 days
Heroin	48 h
Cannabis	
Single use	3 days
Daily use	10 days
Chronic heavy use	21–27 days

Ideally, the drug is given under supervision after the nature of the drug–alcohol interaction is fully explained. It is the possibility of this reaction that makes these drugs contraindicated in certain vulnerable groups, particularly disulfiram and cardiovascular disease. The usefulness of these drugs is controversial, as those who do better on their use are compliant, attend the accompanying psychosocial interventions, and have good motivation, which are themselves good prognostic factors.

Gamma-Aminobutyric Acid (GABA) Analog: Acamprosate This drug acts by restoring normal activity to the glutamate and GABA system disrupted by chronic alcohol use. There is good evidence that acamprosate enhances abstinence and reduces drinking days, but has little effect on craving or rates of severe relapse.

Opiate Antagonist: Naltrexone Naltrexone acts by inhibiting the pleasurable effect of alcohol. It has been shown to reduce relapse and the number of drinking days. The evidence also suggests that it reduces craving and enhances abstinence.

Pharmacotherapy, Drugs

Drugs Used for Detoxification

Detoxification is one of the most widely used treatments but one of the least effective. Research has shown that the majority of opiate addicts cannot sustain abstinence on a long-term basis.

Opioid Agonist: Methadone Methadone is a full opioid agonist with a half-life of 24 h. This allows once-a-day dosing, but a steady state is not achieved until 4–5 days. However, it does have an opioid withdrawal syndrome and, once the patient is stabilized, detoxification is done gradually to ensure that the symptoms are tolerable.

Alpha$_2$-adrenoreceptor Agonists These include clonidine and lofexidine; the latter induces less hypotension and sedation than clonidine. These reduce the somatic symptoms of withdrawal. There is no difference in outcome between these agents and methadone in detoxification.

Ultrarapid Opiate Detoxification This technique induces acute withdrawal using naloxone and naltrexone while the patient is under general anesthesia. There is no evidence for effectiveness and serious concerns about safety.

Drugs Used for Maintenance

Opioid Agonist: Methadone The safety and efficacy of methadone maintenance have been unequivocally established. It has been shown to reduce crime, drug use, HIV transmission, and mortality as well as to improve general health and social status. Over the past decade, there has been a major growth in the use of methadone across Europe. To ensure a good outcome requires induction, stabilization, and maintenance, which usually requires a dose above 60 mg a day, and must be accompanied by appropriate psychosocial intervention.

Partial Opioid Agonist: Buprenorphine Buprenorphine is comparable in effectiveness to methadone. Its advantages are that there is less risk of overdose, less dependence, and a smoother withdrawal, but it is more expensive and has a higher risk of being injected.

Drugs Used to Prevent Relapse

Opioid Antagonist: Naltrexone Naltrexone prevents the euphoria or other effects of heroin. As for alcohol, most patients describe reduced cravings. However, there is mixed evidence for benefits.

Stimulants

Many agents have been tried with stimulant users. For withdrawal relief, antidepressants (such as tricylics) or dopamine agonists (such as bromocriptine) have been tried. Dopamine antagonists and anticonvulsants potentially counter the pleasurable effects of stimulants. However, thus far, the evidence for their effectiveness is not convincing. This is unlike the evidence for psychosocial interventions, which is the treatment of choice for stimulant-related problems.

Psychosocial Interventions

Brief Interventions for Alcohol

Brief interventions are aimed at patients who are drinking at harmful levels. The structured intervention usually takes the form of advice, education, self-management training, group therapy, or motivational interviewing. It has been shown to be effective in reducing alcohol consumption.

Alcoholics Anonymous/Narcotics Anonymous

These organizations use the disease model, stress abstinence, and adopt a 12-step approach. Although there are no rigorous trials, the evidence suggests that these are as effective as other psychotherapies.

Relapse Prevention and Cognitive Behavior Therapy

This therapy is based on the work of Marlatt and Gordon. The assumption is made that substance misuse is a means of coping and the patient is taught how to manage high-risk situations. Typically, patients attend only 50% of the time, but all the same there is a modest overall effect.

Motivational Interviewing

This has been described by Miller and Rollnick. As a technique it is based on cognitive dissonance and encourages patients to find their own reasons to attempt change. It has a good research base that shows effectiveness.

Contingency Management

This uses positive control techniques in the form of rewards in response to abstinence. It has generally been used for opiates and cocaine and has been shown to be effective.

Community Reinforcement, Couple and Family Therapies

Here the patient is rewarded for abstinence by agreed strategies. These therapies do have some effectiveness.

Residential Rehabilitation

This is a planned and usually highly structured program of counseling and other support services aiming for global lifestyle changes. There are three broad types: (1) therapeutic communities, which have the biggest research base; (2) 12-step programs, based on the Minnesota Model; and (3) general

or Christian houses. Completion rates are often below 20%. Residential programs are as effective as community programs, but at a much greater cost.

The Law

Responsibilities of the Doctor

The use of drugs and the consequences of drug use (e.g., prison, viral transmission) may be associated with prejudice and stigma. However, the UK General Medical Council has firmly stated that it is unethical to withhold treatment from any patient based on that patient's lifestyle or location of that patient. The principle behind this treatment is the harm reduction model. A doctor should offer a treatment once that treatment can be shown to reduce the degree of overall harm either to the individual or society. All individuals are entitled to the same standard and range of treatments.

In a custodial setting, there can be demands to prescribe excess quantities or an institutional ethos to resist demands for medication. This has to be avoided. Usually, the most pressing need is with the competent management of withdrawal. If a doctor is placed in a situation where this competency is not possible then it is advisable to refer the patient to a location where this is possible. Ideally, the institution has a set policy for prescribing and the circumstances of substance withdrawal.

With all consultations, confidentiality is important, but particularly so with drug problems. This is because part of a thorough assessment inquires about prohibited activities used to fund drug use. If patients do not feel secure, it will hinder their ability to access treatment. Confidentiality can only be broken in extreme circumstances, e.g., threat to the life of another. However, it is appropriate to raise concerns over criminal activity or prostitution. It is advisable to warn the patient about the risks of driving motor vehicles or the use of machinery. With shared care or in a multidisciplinary team setting it is helpful to have guidelines on shared and individual professional responsibility.

There are three circumstances where confidentially is impinged upon. The first is compilation of statistics. There are regional drug misuse databases, to which reporting is voluntary and done at a local level. They give a broad overview since all drug use and a wide range of providers are included. The second circumstance relates to HIV, hepatitis B or hepatitis C, usually acquired by injecting drug use. There is a statutory requirement to notify in the case of these infections, and the data are used for epidemiological purposes. Finally, the UK Home Office scrutinizes the dispensing of controlled drugs.

Guidelines on Prescribing

In the UK a prescription for a controlled drug must be written in the doctor's handwriting and state the form, strength, dose, and total quantity. A doctor whose practice entails a large amount of prescribing of controlled drugs can apply for a handwriting exception. In a hospital setting, there is a special prescription form for opiates and cocaine in the treatment of addiction. A general practitioner has a special prescription form to issue daily dispensing. A patient can travel abroad freely with under 500 mg of prescribed methadone, although it is useful to have a "To whom it may concern" letter indicating the exact circumstances. Any amount above 500 mg requires the patient to apply for a license to the Home Office. Of course, this license only covers exit and entry to the UK and the visited country may have separate and different protocols.

In general, drugs that have an abuse potential should be used very cautiously in dependency. These are drugs that have a high black-market value, especially pharmaceutical or synthetic opiates, or drugs that can be injected despite being in oral form, such as buprenorphine or capsules of temazepam. Heroin, cocaine, and synthetic opiate dipipanone are prohibited in drug dependence. These can be used for other conditions, but even if these are present in a drug addict, such drugs are still not to be used.

Capacity

Drug dependency is not seen as a reason in itself to cause impaired capacity. In law, a person is deemed to be responsible for his/her actions irrespective of the presence of a state of intoxication. In other words, being intoxicated is no defense. This is so as the person willingly placed him/herself in an intoxicated state and so is conscious of the possible consequences. However, a defense could be made if the person was unaware that he/she was consuming a drug, with which he/she was not familiar, for example, in the case of a "spiked drink."

On the same theme, as capacity is not impaired there are no powers of detention for dependency alone under the current UK mental health legislation. Of course, a person could still be detained if there was another comorbid mental illness or when detaining is for assessment if there was doubt as to the diagnosis. At the time of writing, the UK government is considering introducing new mental health legislation where this would no longer be the case.

The fact that capacity is not impaired is also reflected in the fact that drug addiction by itself does not form the grounds for separating parents and children. Parents might not present for treatment if they feared that this was indeed the case. The guiding principle is the Children Act 1989, which states that "the welfare of the child is paramount." A care order is only given provided it meets two criteria. The first is that the child is suffering or likely to suffer significant harm and, second, that this is attributable to care not being what it would be reasonable to expect from a parent. Of course, parents with substance problems have heightened risk of child care issues.

Driving

It is an offense to be in charge of a vehicle if "unfit to drive through drink or drugs." A driver who is suspected of being under the influence of either drugs or alcohol can be asked by the police to go forward for urine or blood testing. In the case of suspicion of drug use, the driver will first perform "coordination tests" and then go on for testing if the test is failed. Statistically, there are good reasons for this. As already mentioned, 5% of road traffic accidents involve illegal alcohol levels. In the mid-1980s, for fatal traffic accidents alcohol was implicated in 35% of cases and drugs in 3%. By the year 2000 the percentage for drugs had risen to 24.1%, the majority testing positive for multiple drugs.

The use of substances will affect a person's application for a driving license or place conditions on the license if already held. In general, if the urine screen shows cannabis, the license will be withdrawn for a year; if any other drug has been used, the withdrawal will be for a year, and longer if there is persistent misuse. Under the Road Traffic Act 1988, it is the duty of the holder of the licence or an applicant to disclose any relevant medical disability to the Driving and Vehicle Licensing Agency (DVLA). The use of prescribed medication to treat drug dependency is considered a relevant disability. A driver using a prescribed drug, like methadone, would not automatically be considered unfit to drive. A patient with a group 1 license will have to undergo an independent medical examination and a urine drug screen. If the screen is only positive for methadone, then the license will be issued for 1 year at a time. If the person stops methadone treatment, then this annual supervision is continued for 3 years and if after that time there is no concern, all restrictions are lifted. The methadone must of course be part of a treatment program and should be accompanied by a favorable report from the supervising consultant. If the person is on injectable methadone, he/she is unlikely to receive a license or likely to have it withdrawn. In exceptional cases, with a medical report stating that the person experiences low levels of sedation, a license may be given. A person on methadone treatment will not receive a group 2 (heavy goods vehicle/public service vehicle) license or will have it withdrawn for at least 3 years.

As mentioned, it is the responsibility of driving license holders to inform the DVLA about any treatment they are receiving for substance problems. For a doctor to inform the DVLA is a breach of confidence. However, if a doctor is concerned about a patient's ability to drive, then the General Medical Council advises to discuss it first with the patient and offer a second opinion. If the patient continues to drive, efforts should be made to encourage him/her not to do so, including informing the next of kin. Despite this, if the patient continues to drive, then that doctor should inform the patient that he/she is informing the DVLA. The final step is for the doctor to contact the medical advisor at the DVLA and inform the patient that he/she has done so.

Legal Framework

The Misuse of Drugs Act 1971 is the main law regulating drug control in the UK. This act fulfills the obligations of the United Nations Single Convention of Narcotic Drugs and the 1971 Convention on Psychotropic Substances. Drugs are classified under Schedule 2 of the Act. A class A drug is harmful and examples are heroin and cocaine. A class B drug is intermediate and examples are amphetamines and barbiturates. However, an injectable preparation of a class B drug is designated as class A. Finally a class C drug is the least harmful and includes anabolic steroids, benzodiazepines, and growth hormone. As for cannabis, after a request by the UK Home Secretary in 2002 to the Advisory Council on the Misuse of Drugs, cannabis has been reclassified from a class B drug to a class C drug as from 2004.

Police contact can be a stimulus to referral for drug treatment. One option is arrest referral schemes, where the police refer persons to their local agency. In other words, the point of arrest is used to encourage the person to avail of treatment. Drug treatment and testing orders were initiated in 2000 for the more persistent offender. These are used for cases with more extended crime, use of class A drugs, or comorbid mental health problems. This involves joint working between the probation and drug treatment services using the harm reduction model. There is a structured support, twice-weekly drug testing, and monthly court reviews. Besides

these options, the UK Criminal Justice Act 1991 allows for treatment of drug or alcohol problems as part of a probation order.

Drug Offenses

In general, drug consumption is not an offense, but possession is. Broadly, there are three different types of drug offenses. The most common drug offense is possession of a named illicit drug such as heroin. If a larger quantity is seized or there is strong circumstantial evidence, the likelihood is that the person is a dealer in drugs and the offense is supply or intention to supply or possession with intention to supply drugs. Finally, the third offense is that of importation if very large quantities of drugs are involved and being brought across national boundaries. It has been shown that substance misuse treatment reduces this type of crime. In NTORS, being on a methadone maintenance program reduces drug selling to 13% of preprogram levels in 1 year. This gradually rises subsequently, but even after 5 years it reaches only 17% of the preprogram level.

Crime

Substance misuse is a clear generator of crime. In the UK, 120 000 people were sentenced for drug-related offenses in 1999. In 2001, the UK prison population was 65 000; 37 000 of these had contact with the prison substance treatment services. There are well-established epidemiological links between the two. The 2000 New England and Welsh Arrestee Drug Abuse Monitoring report showed a statistical correlation between arrests, being positive for drug use and all criminal behavior. The association was particularly strong for heroin and cocaine. Increasing drug use was shown to correlate with increasing crime. The majority of drug-related offences are due to acquisitive crime, not crimes to the person, homicides, driving and drug offences. The exact causal relationship between substance misuse and acquisitive crime is complex; both are associated with areas of poverty and social deprivation. The offense is usually assumed to be used to support a habit, but in fact the act of offending often precedes drug dependence. However, what has been shown to have a causal relationship is effective treatment and a reduction in crime. One study on methadone maintenance showed that the number of crime days per month fell from 11 to 7. However, effective treatment will not eliminate crime completely. NTORS showed that acquisitive crime fell for methadone maintenance programs to 23% of the intake level at 5-year follow-up. This is a significant drop, confirming the effectiveness of treatment to reduce, but not eliminate, crime. The association between substance misuse and crime as well as the large numbers involved show why one of the central tenets of the harm reduction approach is to decrease crime.

Violence

There is a strong positive link between substance misuse and violence. The MacArthur Violence Risk Assessment Study showed the 1-year rate of violence for substance misuse, personality, and adjustment disorder to be 43%, the highest for any category. The relationship between substances and violence is complex, as not only do the acute physiological disturbances caused by intoxication, withdrawal, and dependence account for the violence, but so does the context of substance use, the environment, the culture, and individual personal factors. Table 11 lists the substances associated with violence, but in general alcohol has a greater risk than drugs, which are more associated with acquisitive crime. Evidence given to the British All Party Group on Alcohol Misuse stated that in 44% of all violent incidents the assailant was drunk at the time. Alcohol is associated with 70% of stabbings, 70% of beatings, and 50% of domestic assaults. In 1999, Appleby compiled a report of 500 court homicide cases, in which 31% were identified as having a history of alcohol misuse, with 51% having alcohol as a contributing factor. The same report noted that 35% had a history of drug misuse, with 18% having drugs as a contributing factor. Besides homicides, patients with substance problems are at much higher risk of suicide. In people who commit suicide and are in contact with mental health services in the year before their death, 25% have a primary diagnosis of substance dependence or personality disorder and 50% a secondary diagnosis for these groups. Substance misuse greatly contributes to violence of any form, either to self or to others.

Government

The Home Office and the Home Secretary, since 2001, have overall responsibility for drugs in the

Table 11 Associations with violence

Positive	*None*
Alcohol	Sole use of opiates
Cocaine	Nicotine
Amphetamines	
Benzodiazepines	
Cannabis	

UK. The Ministerial Steering Group on Drugs focuses on developing strategy. The UK Anti-Drugs Coordinator and deputy are members of this committee and report to it. This committee produces an annual report summarizing overall events, policies, and interventions in the drug arena. At a local level, 150 drug action teams (DATs) deliver services. At a regional level, the Drug Prevention Advisory Services, of which there are nine, support the DATs. Prisons provide counseling, treatment, referral, advice, and throughcare services. The two most recent major policy documents affecting drugs are *The Effectiveness Review* (1996), and *Tackling Drugs to Build a Better Britain* (1998). The first highlighted the requirement for all substance misusers to have a general practitioner, the role of shared and specialized services, and the centrality of harm minimization. The second puts forward a 10-year strategy to tackle four main areas: (1) young persons; (2) communities; (3) treatment; and (4) drug availability. The most recent policy document affecting alcohol, the *Alcohol Harm Reduction Strategy for England*, places emphasis on prevention by education and voluntary codes for the alcohol-related industry, but less emphasis on brief interventions, changing current alcohol testing procedures for drivers or using price and taxes to control alcohol consumption.

Summary

Substance misuse is an area of high mortality and morbidity with associated social problems, including criminality. Over the last decade, there have been significant developments in the field of addiction. There are effective pharmacotherapeutic and psychosocial interventions. With greater understanding of each substance-related problem, the constituents of these interventions are being honed further to give more tailored treatments. The results from large-scale outcome evaluations such as NTORS show significant positive benefits for the individual and society. The challenge ahead is for greater detection of substance misuse with increased availability of effective interventions. Due to the high prevalence of substance misuse, this is even truer for the forensic setting.

See Also

Road Traffic, Determination of Fitness To Drive: Sobriety Tests and Drug Recognition; **Substance Misuse:** Medical Effects; Cocaine and Other Stimulants; Heroin; Substitution Drugs; Miscellaneous Drugs; Patterns and Statistics; Crime; **Toxicology:** Methods of Analysis, Antemortem

Further Reading

Cabinet Office (2004) *Alcohol Harm Reduction Strategy for England*. London: Prime Minister's Strategy Unit.

Cami J, Farre M (2003) Mechanisms of disease: drug addiction. *New England Journal of Medicine* 49: 975–986.

Chick J, Cantwell R (1994) *Seminars in Alcohol and Drug Misuse*. London: Royal College of Psychiatrists.

Department of Health (1996) *Task Force to Review Services for Drug Misusers: Report of an Independent Review of Drug Treatment Services in England*. London: Department of Health.

Department of Health (1998a) *Drug Misuse and Dependence – Guidelines on Clinical Management*. London: Department of Health.

Department of Health (1998b) *Tackling Drugs to Build a Better Britain*. London: Department of Health.

Department of Health (2001) *Annual Report on the UK Drug Situation 2001*. London: Department of Health.

Driver and Vehicle Licensing Agency (1998) *At a Glance Guide to Medical Aspects of Fitness to Drive*. London: Driving and Vehicle Licensing Agency.

Gossop M, Marsden J, Stewart D, Kidd T (2003) The National Treatment Outcome Research Study (NTORS): 4–5 year follow-up results. *Addiction* 98: 291–303.

Kintz P, Samyn N (2002) Use of alternative specimens: drugs of abuse in saliva and doping agents in hair. *Therapeutic Drug Monitoring* 24: 239–246.

Luty J (2003) What works in drug addiction? *Advances in Psychiatric Treatment* 9: 203–288.

Marshall EJ, Farrell M (2003) Substance use and psychiatry. *Psychiatry* 2: 1–35.

Marshall EJ, Farrell M (2004) Substance use and psychiatry. *Psychiatry* 3: 36–39.

Prochaska J, DiClemente C (1992) Stages of change in the modification of problem behaviours. *Progress in Behaviour Modification* 28: 183–218.

Snowden P (2001) Substance misuse and violence: the scope and limitations of forensic psychiatry's role. *Advances in Psychiatric Treatment* 7: 189–196.

Swanson J, Holzer C, Ganju V (1990) Violence and psychiatric disorder in the community: evidence from the Epidemiological Catchment Area Survey. *Hospital and Community Psychiatry* 41: 761–770.

Taylor PJ, Gunn J (1999) Homicides by people with mental illness: myth and reality. *British Journal of Psychiatry* 174: 9–14.

Weatherall D, Ledingham J, Warrell D (1996) *Oxford Textbook of Medicine*, 3rd edn. Oxford: Oxford University Press.

Wolff K, Farrell LM, Marsden J, *et al.* (1999) A review of biological indicators of illict drug use, practical considerations and clinical usefulness. *Addiction* 94: 1279–1298.

World Health Organization (1992) *The ICD-10 Classification of Mental and Behavioural Disorders*. Geneva: World Health Organization.

Malingering

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Introduction

An implicit assumption in medical and psychological practice is that patients will be open and honest in their self-reports. With the advent of managed care, however, the basis of the assumption has steadily eroded. Moreover, in forensic practice patients may be motivated to be less than forthright with their evaluators. This article provides an overview of malingering and related response styles, focusing primarily on the malingering of mental and cognitive disorders.

Knowledge of malingering and related response styles is imperative for those working in forensic settings. Far from being a rare and trivial event, altered response styles are often encountered in forensic practice. Knowledge and a heightened awareness of its presentation allow for proper identification and treatment of those suspected of malingering. The article begins with an overview of malingering and defines terms commonly encountered in the malingering literature. To provide context for the assessment of malingering in forensic settings, explanatory models of malingering and common myths associated with malingering and its presentation are discussed. Finally, the article concludes with an examination of detection strategies for malingering and evaluates the available measures for malingering.

Malingering is defined by the American Psychiatric Association (APA) as "the intentional production of false or grossly exaggerated physical or psychological symptoms, motivated by external incentives." The two key features of malingering are: (1) intentionality; and (2) motivation. The intentional nature of malingering differentiates it from somatoform disorders, in which the production of symptoms is unintentional. Likewise, malingering is differentiated from "factitious disorder" by its motivation. Factitious disorders are motivated by internal incentives, such as adopting or maintaining a "sick role." External incentives are necessarily absent. In contrast, malingering requires "obvious, external incentives."

As a critically important issue, false symptoms are not necessarily malingering. Similarly, not all altered response styles are malingering. Patients may adopt a range of response styles, including malingering, defensiveness, and honest responding (Table 1). In contrast to malingering, defensiveness is the denial or minimization of symptoms and can be reasonably applied to either internal or external motives. The terms "feigning" and "dissimulation" are often used as generic descriptors of altered response styles in that they make no assumptions about motivation (internal or external).

The *Diagnostic and Statistical Manual* (DSM-IV-TR) provides guidelines for when malingering should be suspected. Specifically, the DSM-IV suggests that malingering be "strongly suspected" if two or more of the following indicators are present:

1. The evaluation occurs within a medicolegal context.
2. The person's claimed stress or disability is not consistent with objective findings.
3. The individual is uncooperative with the evaluation and the prescribed treatment regimen.
4. The individual meets criteria for "antisocial personality disorder."

Clearly the DSM-IV-TR advocates for a strong index of suspicion for any clinician working in correctional and forensic contexts, highlighting the fact that malingering may be more common in these settings than previously believed. Although the utility of the DSM criteria have been questioned by some, they do serve to heighten awareness of its existence, particularly in correctional and forensic settings.

The suspicion of malingering must be further tempered by an appreciation of the potentially damaging effects of a malingering classification. Misclassification of patients as either genuine or malingering has grave consequences. In the criminal forensic realm, a genuine patient mistakenly classified as malingering is denied much-needed mental healthcare and returned to face a criminal proceeding with which he/she is ill equipped to handle. Moreover, the mere allegation of malingering serves to discredit the accused. In the civil arena, genuinely impaired individuals (e.g., plaintiffs in personal-injury suits) may seek relief through the courts. Errors in the assessment of malingering deny the person needed healthcare and stymie legal efforts. The importance of such errors has led to the recommendation that all forensic referrals be systematically assessed for malingering and related response styles. Assessment and classification must be approached with utmost care.

Malingering is often perceived as an uncommon phenomenon, particularly in nonforensic settings. For this reason, many practitioners have not received formal training in its assessment and classification. However, malingering may occur in 15% of forensic

Table 1 Terms and definitions associated with malingering and other altered response styles

Term	*Definition*
Honest responding	Characterized by the patient's sincere attempt to be forthright in his or her self-reporting
Malingering	Conscious fabrication of symptoms chiefly motivated by an external goal
Factitious presentation	Fabrication of symptoms chiefly motivated by an internal goal, namely to adopt the patient role
Defensiveness	Conscious denial or minimization of symptoms
Dissimulation	Primarily used to encompass all nonhonest response styles. However, a few authors have utilized this term as a synonym for defensiveness
Feigning	A generic term for ''fake-bad'' that avoids assigning either internal or external motivation
Overreporting	A generic term used to avoid assumptions of intentionality. Overreporting can range from being conscious and intentional to unconscious and out of the patient's awareness
Suboptimal effort	Most often used in the cognitive literature. Outright malingering of cognitive deficits must be distinguished from suboptimal effort that may result from a host of legitimate difficulties

and 7% of nonforensic cases, highlighting its potential importance to all practitioners. Unfortunately, without training, clinicians are left to approach its identification with preconceived notions regarding its etiology and rely on commonly held misbeliefs regarding its presentation. To provide a context for the comprehensive assessment of malingering, the discussion now turns to an overview of explanatory models of malingering and presents some commonly held myths regarding its presentation and identification.

Explanatory Models

Rogers has outlined three explanatory models of malingering: (1) the pathogenic model; (2) the criminological model; and (3) the adaptational model. Each model attempts to explain the motivation that prompts individuals to malinger. Each of these models is described below.

Pathogenic Model

The pathogenic model dominated early conceptualizations of malingering and finds its roots in psychoanalytic theory. It postulates that the production of false symptoms serves as a defense against genuine symptoms that are currently being repressed. The patient attempts to contain and control the emergence of disturbing symptoms by consciously producing the symptoms, thereby exerting control of their manifestation.

Because the underlying cause of the malingering is presumed to be a genuine mental disorder, the pathogenic model predicts that malingerers will eventually become genuinely mentally ill. This model has fallen out of favor with the medical and psychological communities, largely because its predictions have often not been borne out. In personal-injury cases, several investigators have observed a dramatic decrease of symptoms once the motivation to malinger is removed. This observation has led to the coining of pejorative terms such as "accident neurosis," "compensation neurosis," "compensationitis," and "greenback neurosis." Furthermore, a recent prototypical analysis found very little support for the pathogenic model of malingering.

Criminological Model

Rogers has described a second explanatory model based on the premise that malingerers are "bad" people involved in "bad" circumstances. This model, termed the criminological model, figures prominently in the DSM conceptualizations of malingering. The criminological model has been criticized on several grounds, including its overemphasis on criminality and uncooperativeness. Strict adherence to the criminological model results in a drastic overestimation of malingering in forensic evaluations. For example, nearly all adolescent offenders meet at least two criteria (#1, "medicolegal context" and #3, "uncooperative"), as do many chronic adult offenders (#1, "medicolegal context" and #4, "antisocial personality disorder"). Such individuals are automatically suspected of malingering, with potentially devastating consequences.

Adaptational Model

Rogers advanced a third explanatory model, namely the adaptational model of malingering, which offers an alternative to classifying malingerers as either mad (pathogenic model) or bad (criminological model). Instead, malingering is seen as an understandable attempt to cope with adversarial circumstances. Facing harsh consequences for their criminal behavior, some defendants may choose to malinger with a mental disorder in an attempt to avoid punishment. In civil cases, individuals may exaggerate or fabricate

their symptoms in order to maximize potential benefits (e.g., monetary damages or disability payments). The central premise of the adaptational model is that an individual malingers because he/she perceives it to be a potentially effective strategy for meeting current needs. Healthcare professionals applying the adaptational model to their practices can understand the motivation to malinger and thereby reduce their countertransference at being fooled by their patients. The most recent revision of the *International Classification of Diseases* appears to recognize the adaptational nature of malingering in defining it as "understandable in light of ... the individual's circumstances."

Patients and criminal defendants are not unique in viewing deception as a viable choice in difficult circumstances. In a survey of physicians, Novack and colleagues found that the majority of physicians indicated a willingness to use deception to secure insurance payment. Such deception combines altruism (greater access to services) with self-interest (financial gain). Nearly one-third indicated they would provide misleading information to a patient's family if a medical mistake had led to the patient's death. In all, 89% of the physicians reported that deception is acceptable in certain circumstances.

Myths of Malingering

Healthcare professionals are often misled by common myths about malingering. Six myths are summarized that may lead to grave errors in the classification of malingering.

A Patient Who is not Completely Honest is Probably Malingering

Patients may adopt a range of "response styles" in their clinical presentations. These response styles can range from outright denial of symptoms (i.e., defensiveness) to complete fabrication of bogus symptoms (i.e., malingering). Table 1 provides descriptions of many response styles and defines common terms often encountered in the malingering literature. Most persons, including healthcare professionals, are not completely forthright when faced with adversarial circumstances. To equate a lack of total honesty with malingering is a very serious error.

Inconsistent Responders are Malingering

Patients are inconsistent in their self-reports and behaviors for many possible reasons, only one of which is malingering. When confronted with an inconsistent presentation, the most prudent course of action is actively to seek out alternative explanations for the inconsistency. Many genuine patients provide inconsistent accounts of their histories and symptoms and manifest erratic (i.e., inconsistent) behaviors as a result of their mental disorders. For instance, severely impaired patients have poor insight and are incapable of providing a consistent, factually accurate account of their symptoms. Patients with long histories of mental disorder may not remember many details of their histories at every interview. Differences in interviewing methods may elicit new or different information, inconsistent with prior findings. Importantly, such inconsistencies are sometimes the product of the assessment rather than the patient.

Grave errors occur when inconsistent responding is equated with malingering. In some cases, inconsistent responding on psychological testing is inaccurately interpreted as evidence of malingering. An example, the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), with over 500 questions, is difficult for some psychiatric patients with a diminished ability to concentrate because of disabling symptoms or possibly from side-effects of their medication. Its eighth-grade reading level is also a significant obstacle in criminal forensic settings where educational achievement is often marginal. Inconsistencies, by themselves, may not necessarily demonstrate malingering.

Malingerers are so Fantastic in their Presentations, they are Easy to Identify

Many professionals in forensic settings readily recall a remarkable case involving a presentation so outlandish that malingering was the obvious conclusion. Although a small number of malingerers invent incredible symptoms, most malingerers are not remarkable in their presentations. They may be knowledgeable about mental disorder and convincing in their presentations. Taken from the adaptational model, these individuals view feigning as the best possible strategy to meet their current goals. They are, therefore, highly motivated to avoid detection. Systematic and comprehensive assessment is often the best method for identifying the skilled or practiced malingerer. Some of the more common detection strategies are outlined in a subsequent section.

Malingering Occurs so Infrequently, it is not Really an Issue

Rogers noted in the course of conducting workshops and other educational programs that he is frequently surprised by professionals who claim never to have

seen a case of malingering. The implicit assumption is that malingering is quite rare. In contrast, adherence to the criminological model, as outlined earlier, suggests that most criminals involved in forensic evaluations are likely to be malingering. The truth is likely to fall somewhere between these two extremes.

Available data suggest that malingering is likely to occur in a substantial minority of forensic evaluations. For example, Rogers and colleagues found estimates of malingering of 15.7% in forensic settings. Other estimates place the base rate of malingering anywhere from 8% to 17.4%. These estimates assail the notion that malingering is rare and underscore the need for its systematic and routine assessment.

Projective Methods, e.g., The Rorschach Inkblot Test, Are Immune to Malingering

Early research from the 1930s and 1940s suggested that the Rorschach, as a projection of unconscious dynamics, might be immune to malingering. More recent research, however, has demonstrated its vulnerability to faking. Schretlen's review of malingering on the Rorschach noted most studies were plagued by methodological limitations. However, rigorous studies demonstrated that malingerers can produce Rorschach results that are indistinguishable from genuine psychiatric patients. In summary, no clear signs or scales reliably identify malingering on the Rorschach. In their recent text on insanity evaluations, Rogers and Shuman argue that the Rorschach and other projective measures should not be used for determinations of malingering, nor should the protocols be interpreted in cases where feigning is suspected.

Malingering and Mental Disorder are Mutually Exclusive

A common pitfall in forensic evaluations is the assumption that individuals who malinger are free from genuine mental disorders. In reality, malingering is much more likely to exist on a continuum ranging from the marked exaggeration of *bona fide* distress to the outright fabrication of preposterous symptoms. This continuum increases the complexity of the assessment task. When faced with an exaggerating patient, it becomes challenging to distinguish malingered from genuine psychopathology. The added complexity requires that evidence of mental disorder (or lack thereof) be established through patient records and collateral interviews. The patient invested in exaggerating his/her level of distress cannot be relied upon to provide accurate self-reports. Third-party interviews with friends and family combined with educational and psychiatric records can often provide the needed information.

Detection of Malingering

Healthcare professionals, particularly in the forensic domain, are faced with the challenging task of distinguishing malingerers from their genuinely disordered counterparts. Several general approaches to the assessment of malingering have been identified that yield varying levels of success. Of these, three approaches will be examined: (1) unstructured interviews; (2) empirically supported detection strategies; and (3) psychological testing.

Unstructured Interviews

Unstructured interviews often form the basis of history-taking, psychiatric case formulation, and diagnosis. The primary advantages of the unstructured interview are its flexibility and adaptability across patient populations. On scientific grounds, the unstructured nature of the interview is also its greatest liability. The previous section highlighted some of the pitfalls resulting from total reliance on clinical judgment in classifying malingering. In his classic study, Rosenhan provides compelling evidence regarding the limitations of unstructured methods in accurately identifying feigned presentations. More recent research has demonstrated the inaccuracies of clinical judgment in decision-making, including the detection of malingering.

Detection Strategies for Feigned Psychopathology

A second approach is the use of well-established detection strategies for malingering and associated response styles (Table 2). Four of the strategies are well validated across different research designs and empirical studies: (1) rare symptoms; (2) symptom selectivity; (3) absurd symptoms; and (4) obvious versus subtle. Furthermore, these strategies can be easily incorporated into traditional clinical interviews.

Rare symptoms The rare-symptoms strategy relies on the overendorsement of symptoms that are often infrequent among genuine patients. An example of a rare symptom may be: "Can thoughts be extracted from your mind without you knowing it?" Genuine patients seldom endorse these items. In contrast, malingerers are typically unaware of their rarity and may endorse a substantial proportion of rare symptoms.

Table 2 Empirically supported detection strategies for feigned psychopathology

Strategy	*Description*
Rare symptoms	Overendorsement of symptoms that are very infrequent among genuine patients
Symptom selectivity	Indiscriminately endorsing a great number of symptoms without consideration for possible diagnosis
Absurd symptoms	Endorsing or creating fantastic or unbelievable symptoms. Although this is rare among malingerers, its presence is highly suggestive of malingering
Obvious versus subtle	Endorsing a greater number of symptoms that are obviously related to mental disorder

Symptom selectivity Past research has suggested that some malingerers indiscriminately endorse a great number of symptoms without any consideration for possible diagnoses. As a benchmark, when presented with a wide array of symptoms, malingering should be suspected when patients endorse two-thirds or more of these symptoms and associated features.

Absurd symptoms The majority of malingerers do not create or endorse preposterous symptoms. Nonetheless, a minority of unsophisticated malingerers are apparently unaware that their symptom presentation lacks believability.

Often, fantastic symptoms are revealed through the use of follow-up questions about symptoms or probes used in a structured interview. For mood disorders, an example of an absurd symptom might be "Do you believe that weeping-willow trees have contributed to your depression?"

Obvious versus subtle Malingerers are likely to endorse a greater number of obvious symptoms than their genuinely mentally ill counterparts. Obvious symptoms refer to those symptoms that are easily recognizable as psychopathology (e.g., suicidal thoughts as a symptom of depression). In contrast, subtle symptoms do not necessarily appear related to mental disorders (e.g., early-morning awakening as a symptom of depression). Malingerers are more likely to endorse a very high proportion of obvious symptoms, because they are easy to recognize and manipulate. This detection strategy is best assessed via standardized methods, such as structured interviews.

One advantage of adopting the use of systematic detection strategies is the ease with which they can be introduced into the traditional clinical interview. During the course of history-taking and review of current symptoms, questions related to detection strategies can be unobtrusively inserted. Endorsement of these items provides initial evidence that a more comprehensive assessment for malingering may be required.

Validated Measures of Malingering

A third approach is the use of validated measures of malingering and related response styles. Measures of malingering can be classified as either screens or tests. Screens are often useful as brief guides that identify unusual presentations suggestive of possible feigning. Because of their brevity, screens commonly have high rates of false positives. Screens are not intended nor should they be used for the determination of malingering.

Screens are often effective at identifying individuals who require a more comprehensive assessment. Popular screens include the M Test, the Structured Inventory of Malingered Symptomatology, and the Miller Forensic Assessment of Symptoms Test (MFAST). The MFAST appears to be very promising as a screen for feigned mental disorders.

In contrast to screens, tests of malingering are more comprehensive in their assessments and are intended for the determination of feigned mental disorders. The Structured Interview of Reported Symptoms (SIRS) is currently the best-validated test developed specifically for the detection of malingering and related response styles. Based on well-established detection strategies, such as those described above, the SIRS is a structured interview consisting of 172 items. Its eight primary scales assess well-validated detection strategies. Scores on each scale are categorized as one of the following: (1) definite malingering; (2) probable malingering; (3) indeterminate; and (4) honest. Persons malingering mental disorders may be identified by their pattern of scores involving probable and definite feigning categories. Importantly, these patterns result in very few false positives, thereby increasing healthcare professionals' confidence in the SIRS classification.

Multiscale Inventories in the Assessment of Malingering

Many healthcare professionals and forensic experts are surprised to discover that many commonly used psychological tests have limitations in determinations of malingering. Due to the popularity of the MMPI-2,

Personality Assessment Inventory (PAI), and Millon Clinical Multiaxial Inventory, 3rd edition (MCMI-III) in many psychological and psychiatric assessments, this brief section reviews these tests in the context of malingering.

MMPI-2 Perhaps the most popular and widely used multiscale inventory is the MMPI-2, which assesses patterns of psychopathology and personality-related features. Importantly, its authors recognized the importance of response styles (e.g., overreporting and even malingering) and integrated "validity" tests into the development of the MMPI-2. Extensive research has been conducted on the MMPI-2 both for assessing patterns of psychopathology and response styles. Because of its length (567 true–false items) and reading level (eighth-grade), patients should be screened regarding their appropriateness in terms of concentration and literacy.

The MMPI-2 is a highly complex psychological test consisting of clinical scales, content scales, validity scales, and specialized scales. The MMPI-2 is potentially a very valuable measure for the assessment of malingering and feigned mental disorders. The key caveat is that healthcare professionals must rely on psychologists who have sophisticated training in the MMPI-2 and malingering. Grave errors can occur in healthcare professionals' attempts to use "canned" (e.g., computerized or cookbook) interpretations or to rely on psychologists that do not have specialized training. It is the responsibility of healthcare professionals to research the backgrounds of clinical psychologists before using them as MMPI-2 consultants.

A recent metaanalysis of the MMPI-2 and malingering integrated the results of 65 feigning studies for 11 feigning scales and indices. Several important findings emerged:

1. The rare-symptoms strategy was the most effective, although certain diagnostic groups (i.e., schizophrenia and posttraumatic stress disorder) evidenced marked elevations on scales F and Fb. Fortunately, a new scale called Fp proved highly effective with a relatively stable cut score.
2. Scales based on "obvious versus subtle" (i.e., O–S) and "symptom selectivity" (i.e., LW) produced positive yet highly variable results that make it difficult to recommend specific cut scores.
3. The MMPI-2 has a unique detection strategy for malingering based on erroneous stereotypes. The use of this Ds scale proved to be very successful as a specialized scale for evaluating feigned mental disorders.

The determinations of malingering on the MMPI-2 require a multistep process. First, psychologists must use specialized scales to rule-out inconsistent responding that could result in false positives for malingering. Second, psychologists must evaluate scales, such as Fp and Ds, to ensure that any observed elevations are very unlikely to occur in patients with genuine disorders. Third, psychologists must seek confirmatory information from other standardized methods.

PAI The PAI is a recent multiscale inventory with promising research on malingering. Its strengths include nonoverlapping scales, easy reading comprehension (fourth-grade), and shorter administration time (344 items). Unlike research with the MMPI-2, feigning studies have typically utilized the standard cut scores, with promising results.

The PAI has three primary fake-bad indictors, namely negative impression management (NIM), the malingering index (MAL), and the Rogers' discriminant function (RDF). NIM and MAL have received empirical support in both simulation and known-groups designs; however, Rogers cautions against the use of his RDF in forensic cases. Preliminary guidelines for the screening and detection of malingering have been offered:

1. Rule-out feigning: a NIM score $<$77T indicates a low probability that the patient is feigning.
2. Screen for feigning: marked elevations on NIM (77–109T) indicate the need to evaluate more thoroughly the issue of feigning, perhaps through the use of a specialized measure such as the SIRS.
3. Likely feigning: extreme elevations on NIM ($\geq$110T) or the MAL ($\geq$5) indicate a strong likelihood of feigning.

MCMI-III The MCMI-III includes the debasement index as a measure of feigned psychopathology. Relatively few clinical studies have been conducted, with mixed results. One simulation study demonstrated a moderate effect (Cohen's $d = 0.59$) between simulators and inpatients on the debasement index. A primary concern when utilizing the MCMI-III in cases of suspected malingering is that the debasement index is highly correlated with nine of the clinical scales ($r \geq 0.75$) in the normative sample. For example, major depression is correlated at 0.85 with the debasement index. In other words, genuinely elevated clinical scales are likely to be accompanied by elevated debasement scores, making the determination of feigned versus genuine psychopathology exceedingly difficult.

Table 3 Empirically supported strategies for the detection of feigned cognitive deficits

Strategy	*Description*
Floor effect	Failing on very simple questions that even very impaired persons can answer correctly
Performance curve	A comparison of easy items failed and difficult items passed
Violation of learning principles	An individual's performance runs counter to established principles. For example, significantly better performance for delayed versus immediate recall trials
Symptom validity testing	Malingering is suspected when performance on a forced-choice test falls below chance levels

Feigning Cognitive Deficits

An entirely separate body of literature concerns feigning cognitive deficits. A comprehensive review of this literature is beyond the scope of this article; however, that is the very point that warrants attention here. An all-too-common error is to equate the malingering of cognitive and psychopathological impairments and utilize the same strategies or assessment instruments in their classification (e.g., utilizing the MMPI-2 to assess cognitive malingering). Table 3 outlines the empirically supported strategies for detection of malingered cognitive deficits.

Clinical Applications of Strategies and Tests

The far-reaching consequences of malingering determinations require that healthcare professionals go beyond clinical acumen and apply validated detection strategies and standardized malingering measures. Three general reasons for utilizing detection strategies/tests are advanced.

First, the sole reliance on clinical judgment is fallible. Numerous authors have demonstrated the unreliability of unaided clinical intuition. Clinical judgment must be informed by empirically validated strategies and tests. Similar to other diagnostic endeavors, the use of tests facilitates accurate empirically based classification. As an analogy, physicians diagnose heart disease using a range of validated diagnostic tests in addition to their clinical acumen. Likewise, malingering requires both clinical judgment and validated tests in its determination.

Second, the consequences of misdiagnosis of malingering are too grave to be left to chance, particularly in the forensic domain. As outlined earlier, genuine patients misdiagnosed as malingering will almost inevitably be denied treatment and be "tainted" in subsequent legal proceedings. The mere suggestion of malingering is often enough to discredit the patient. In contrast, clinical errors in missing cases of malingering utilize mental health resources and may frustrate the legitimate goals of the legal system. "Successful" malingerers may realize unwarranted gains in civil proceedings or avoid the legal consequences of their criminal behavior. In line with Heilbrun and Rogers, we recommend the systematic assessment of malingering and related response styles of all forensic referrals.

Third, evidence of malingering gained through empirically tested methods is simply more defensible. In forensic cases, particularly for cross-examination, professionals must support their conclusions with data. Expert witnesses are in a much stronger position if they can defend conclusory opinions with empirically supported research. The use of both detection strategies and malingering measures provide experts with crucial scientific support for their findings.

Concluding Remarks

Malingering is a challenging diagnostic concern for clinicians, particularly in the forensic arena. The main focus of this article was to acquaint healthcare professionals with some of the issues involved in malingering and its proper assessment. The importance of systematic assessment was emphasized in light of the devastating consequences of misclassification for both individuals (plaintiffs and defendants) and the legal system. The article also provided a framework for approaching the systematic assessment of malingering, including the adaptational model of malingering and the importance of dispelling common myths. Only reliance on well-established detection strategies and malingering measures can yield the accurate and defensible classification of malingering.

See Also

Forensic Psychiatry and Forensic Psychology: Assessment; Personality Disorder; Criminal Responsibility

Further Reading

American Psychiatric Association (2000) *Diagnostic and Statistical Manual of Mental Disorders*, 4th edn., revised. Washington, DC: American Psychiatric Association.

Garb H (1998) *Studying the Clinician: Judgment Research and Psychological Assessment*. Washington, DC: American Psychological Association.

Heilbrun K (2001) *Principles of Forensic Mental Health Assessment*. New York: Kluwer Academic/Plenum.
Novack DH, Detering BJ, Arnold R, *et al.* (1989) Physicians' attitudes toward using deception to resolve difficult ethical problems. *Journal of the American Medical Association* 261: 2980–2985.
Resnick PJ (1984) The detection of malingered mental illness. *Behavioral Sciences and the Law* 2: 21–38.
Reynolds CR (1998) *Detection of Malingering during Head Injury Litigation*. New York: Plenum.
Rogers R (1990) Models of feigned mental illness. *Professional Psychology: Research and Practice* 21: 182–188.
Rogers R (1990) Development of a new classificatory model of malingering. *Bulletin of the American Academy of Psychiatry and Law* 18: 323–333.
Rogers R (1997) *Clinical Assessment of Malingering and Deception,* 2nd edn. New York: Guilford Press.
Rogers R, Bender SD (2003) Evaluation of malingering and deception. In: Goldstein AM (ed.) *Comprehensive Handbook of Psychology: Forensic Psychology,* vol. 11, pp. 109–129. New York: Wiley.
Rogers R, Shuman DW (2000) *Conducting Insanity Evaluations,* 2nd edn. New York: Guilford Press.
Rogers R, Bagby RM, Dickens SE (1992) *Structured Interview of Reported Symptoms (SIRS) and Professional Manual*. Odessa, FL: Psychological Assessment Resources.
Rogers R, Sewell KW, Martin MA, Vitacco MJ (2003) Detection of feigned mental disorders: a meta-analysis of the MMPI-2 and malingering. *Assessment* 10: 160–177.
Rosenhan D (1973) On being sane in insane places. *Science* 172: 250–258.

Personality Disorder

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Introduction

The concept of personality disorder is one that raises controversy amongst many clinicians in psychology and psychiatry. Its usefulness lies in the potential response to treatment of individuals with this label and also the risks associated with abnormal behaviors, particularly violence and other adverse consequences. There is still a great deal about personality disorders that remains speculative.

Although other mental disorders in psychiatry have been narrowed down in terms of symptom constellations and treatment, personality disorders have not yet achieved this precision. People still regard personality disorder as a pejorative term and, when the label is given to patients, this can lead to therapeutic nihilism, a belief that little can be done and we might as well wash our hands of them. It is important to recognize, however, that personality disorders and mental illnesses often coexist and the fact that someone may have an abnormality of personality development and function does not mean that he/she is untreatable, nor that any intercurrent illnesses cannot be treated. There are however difficulties in distinguishing where mental illness begins and personality disorder ends, as many of the symptom constellations can appear as morbid characteristics in specific mental disorders. As yet there are no specific physical or psychological tests which can be used to diagnose personality disorder formally.

Although instruments have been developed that can accurately measure personality characteristics, little is yet known as to how these personality disorders actually develop, nor their genetic basis. That is for the future. Nevertheless it is important, as clinicians working in forensic psychology or psychiatry, to be able to identify obvious personality disorders, as they can be highly predictive of risk, and also the response of comorbid disorders to treatment.

Diagnosis of Personality Traits and Disorders

Personality is the characteristic pattern of an individual's attitudes, behaviors, beliefs, feelings, thoughts, and values, the sum of a person's emotional, cognitive, and interpersonal attributes. Personality traits are prominent and characteristic features of an individual's personality and do not imply psychopathology. Aspects of personality are present from early life and personality traits are relatively stable from adolescence onwards, consistent of contributory environments and recognizable by friends and acquaintances. However, the term "personality disorder" should be reserved for those consistent patterns of thoughts, feelings, and behavior, that are inflexible and maladaptive.

Five dimensions of temperament have been described which appear to be somewhat independent and to have strong genetic contributions:

1. neuroticism
2. extroversion, contrasting with introversion
3. openness, contrasting with discomfort with novel experiences
4. agreeableness, contrasting with contrariness
5. conscientiousness, contrasting with fickleness.

These temperamental attributes may have implications for the course of psychotherapies that cut across

diagnostic categories. Another dimension of personality not adequately dealt with in the *Diagnostic and Statistical Manual* (DSM-IV) or *International Classification of Diseases* (ICD-10) concerns moral behaviors such as honesty and integrity. The extent to which individuals behave honestly and with integrity differs considerably across individuals and in different situations. Deception and lying are common behaviors that occur in benign forms, e.g., white lies. In its pathological forms, they are psychiatrically important in antisocial personality disorder and sociopathic disorder, pathological liars, and malingerers. Deception and lying may be difficult to assess clinically, in the absence of additional informants. Studies of nonhuman primates suggest that, at least among chimpanzees, deception (equivalent to lying and dishonesty) is relatively common and in some situations adaptive, thus not in itself indicative of personality disorder.

Another proposed personality typology characterizes personality along three dimensions relating to temperamental characteristics presumed to be strongly influenced genetically. These are: (1) harm avoidance; (2) novelty-seeking; and (3) reward dependence. Different personality types may be described according to patterns of scores on these three dimensions, for example, antisocial personalities are characterized by high novelty-seeking, low harm avoidance, and low reward dependence, whereas dependent characters have low novelty-seeking, high harm avoidance, and high reward dependence.

DSM-IV employs a categorical approach to personality. There is a large overlap among the DSM personality disorders and the clustering of these personality disorders under the three broad groups implies a lack of clear boundaries that currently define categories. The three DSM-IV clusters describe: (1) odd or eccentric types (cluster a); (2) dramatic, emotional, and erratic type (cluster b); and (3) anxious and fearful types (cluster c).

The odd or eccentric group includes paranoid, schizoid, and schizotypal personality disorders. Patients with these personality disorders have the core traits of being interpersonally distant and emotionally constricted. People with paranoid personality disorder are quick to feel slighted and jealous, carry grudges, and expect to be exploited and harmed by others. People with schizoid personality disorder lack friendships or close relationships with others and are indifferent to praise or criticism by others. People with schizotypal personality disorder display odd beliefs, engaging odd and eccentric gestures and practices, and exhibit odd speech.

The dramatic, emotional, and erratic group includes borderline, histrionic, narcissistic, and antisocial personality disorders. Patients with these personality disorders characteristically have chaotic lives, emotions, and relationships. People with borderline personality disorder are impulsive, unpredictable, angry, temperamental, unstable in relationships, compulsively interpersonal, and self-damaging with regard to sex, money, and substance misuse. People with histrionic personality disorder are attention-seeking, exhibitionistic, seductive, and self-indulgent. They exhibit exaggerated expressions of emotion and are overconcerned with physical appearance. People with narcissistic personality disorder tend to be hypersensitive to criticism, exploitative of others, egocentric, with an inflated sense of self-importance, feel entitled to special treatment, and demand constant attention. People with antisocial personality disorder are described almost exclusively in behavioral, rather than affective or relational terms. They commit truancy, lie, steal, start fires, break rules, are unable to sustain work or school, and shirk day-to-day responsibilities.

The anxious and fearful group includes patients with avoidant, dependent, and obsessive-compulsive personality disorders. Patients with these disorders are characterized by constricting behaviors that serve to limit risks. People with anxious avoidant personality disorders avoid relationships. People with dependent personality disorder avoid being responsible for decisions, and people with obsessive-compulsive personality disorder use rigid rules that preclude lewd behaviors. People with avoidant personality disorders are hypersensitive to rejection and are reluctant to enter close relationships in spite of strong desires for affection. Those with dependent personality disorders show excessive reliance on others to make major life decisions, stay trapped in abusive relationships for fear of being alone, have difficulty initiating projects on their own, and constantly seek reassurance and praise. Individuals with obsessive-compulsive personality disorders exhibit restricted expressions of warmth, tenderness, and generosity and also exhibit stubbornness, with a need to be right and to control decisions. They are indecisive at times; they often apply rules and morals so rigidly to the point of being inflexible.

There is another example of a personality disorder that is related to brain damage and is referred to as organic personality disorder in the ICD-10 and as personality change due to a general medical condition in DSM-IV. These features include irritability and inappropriate jocularity with euphoria, inappropriate socially disinhibited behavior, and impulsiveness. In contrast, other patients with damage to different areas of the frontal lobe exhibit apathy and indifference.

ICD-10 or DSM-IV

In ICD-10, personality disorders are described as deeply ingrained, maladaptive patterns of behavior, generally recognized by the time of adolescence or earlier, and continuing throughout most of adult life, though often becoming less obvious in middle or old age. The personality is abnormal, either in the balance of its components, the quality and expression, or in its total aspect; because of this deviation or psychopathy, the patient suffers or others have to suffer and there is an adverse effect upon the individual or society.

Although the ICD-10 definition recognizes that personality disorders are distinct from other mental disorders, in their ingrained nature, it continues to retain them within the main axis of mental disorders, which distinguishes it from the American classification in the DSM-IV. Here it is argued that personality disorders should be placed on a separate axis to ensure that consideration is given to the possible presence of personality disorder that might otherwise be overlooked, when attention is directed to usually more florid axis I disorders.

There are distinctions between the two classification systems, in that schizotypal personality disorder is regarded in ICD-10 as on the spectrum of psychotic disorders, whereas in DSM-IV it is regarded as a personality disorder. Also cyclothymic disorder is regarded by some as a version of manic-depressive psychosis and therefore belongs with mental illness. It has subsequently been dropped from the definition of personality disorders.

In ICD-10 personality accentuation was also included to describe people with exaggerated personality traits, in that individuals who show a relatively mild degree of abnormality may be more liable to develop mental illness when affected by circumstances. These are therefore abnormalities of personality, intermediate between normal personality and personality disorder. The main characteristic is the persistence of personality disorder when other mental abnormalities have been treated and therefore we might consider them to be a continuum.

The History of Personality Disorders

Aristotle's Pupil, Theophrastus, described a group of characters (Table 1), based on his observations of humankind. We can see from the descriptions that many people have these characteristics. However, it is important to note that, although people may have these characteristics at one point in their lives, they may not be persistently prone to these characteristics. The nature of the personality disorder is that we now recognize these are persistent traits in individuals diagnosed as suffering from personality disorders.

Table 1 Theophrastus' characters

Dissimulator Affection in acts and words	*Gross man* Obtrusive and objectionable jesting	*Vain man* Paltry desire for distinction
Flatterer Degrading, self-profiting intercourse	*Unseasonable man* Inopportune attitude	*Boaster* Pretending to have advantages not personally possessed
Chatterer Mania of talking hugely without thinking	*Officious man* Presumptious benevolence in word and deed	*Arrogant man* Contempt for everyone except himself
Rustic Grossness which is ignorant of good manners	*Stupid man* Sluggishness of mind	*Coward* Shrinking of the soul caused by fear
Complaisant Agreeable intercourse without good motives	*Surly man* Lack of amenity in speech	*Oligarch* Domination in power and wealth
Reckless cynic Effrontery of doing or saying shameful things	*Superstitious man* Cowardice towards divine power	*Late learner* Pursues knowledge at too advanced an age
Loquacious man Incontinence of speech	*Grumbler* Complaining too much of one's lot	*Slanderer* Malevolent disposition of the soul
Newsmonger Inventing false events	*Distrustful man* Suspects all men of dishonesty	*Friend of the rabble* Has a taste for vice
Unscrupulous man Disregard of reputation for sake of base gain	*Offensive man* Repulsive neglect of the person	*Avaricious man* Pursues sordid gain
Penurious man Economy beyond all measure	*Unpleasant man* Annoyance without being really harmful	*Mean man* Lack of generosity

Basant Puri, Annie D Hall, *Revision Notes in Psychiatry*. Hodder and Stoughton 1998. Reproduced by permission of Hodder and Stoughton Ltd.

This view of temperament persisted for many years in western traditions, but it was not until Pritchard's work in the 1840s that clinicians started to distinguish between abnormal mental state and abnormal personalities. Pritchard described and coined the term moral insanity.

Toward the end of the century, Koch described psychopathic inferiority and since then personality disorders have carried with them a trait of degeneration which makes them much less respectable than a mental illness and indeed, often clinicians use them as a term of abuse when they dislike patients.

The German psychopathologist Kraepelin further developed Koch's ideas, particularly of psychopathy.

He described personality disorders as "morbid mental states," in which the peculiar disposition of a personality must be considered the real foundation of the malady. He described paranoid types, antisocial types, and hypochondriacal types. We now regard personality disorders as developing early in adult life and lasting with greater or less fluctuation throughout the whole of life.

It was Schneider who produced the definition that is still used today, i.e., psychopathic personalities are such abnormal personalities who suffer through their abnormalities, or through whose abnormalities society suffers. Schneider described 10 types: (1) hypothymic; (2) depressive; (3) insecure; (4) fanatic; (5) self-seeking; (6) emotionally unstable; (7) explosive; (8) affectless; (9) weak-willed; and (10) aesthenic psychopathic personality.

In the USA in 1941, Cleckley discussed the clinical status of psychopathic personality disorder and his approach has been developed further by Robert Hare, who developed the Psychopathy Checklist (PCL), based on historical records. That is the characteristic which distinguishes it from self-report measures of personality disorder. It provides a robust diagnosis of psychopathic disorder. Hare also developed a screen version of the PCL, which is referred to as the PCL SV. This is because many professionals have requested a brief instrument that has a higher validity and reliability similar to the complete revised Hare PCL (PCL-R). The PCL SV was not designed to replace the PCL-R, but rather to offer a tool to screen for the possible presence of psychopathy. It is a tool based on a subset of PCL-R items that could be completed in civic and forensic settings in under 90 min. It can be used in psychiatric evaluations, personal connection, and community studies. Currently, it has been used in a MacArthur risk assessment study to assess risk amongst people hospitalized in acute-care psychiatric facilities. The conclusions of the group in May 2004 suggest that it is highly accurate when compared to other approaches to assessing risk amongst that group of patients. It is also more computationally complex than other approaches. Testing is continuing.

There remains a separation in psychiatric diagnosis between axis I (mental-state problems) and axis II (personality disorders).

Personality Development

There are two specific theories relating to this concept. The first is based on studies of populations with characteristics which fall beyond normal. These are then regarded as abnormal. These theories are described as nomothetic. Then there are idiographic theories that relate to the specific individuals' uniqueness. This is therefore based on the study of the individual. Kelly, in his personal construct theory, suggests that the individual interprets the world on the basis of his/her past experience. The individual then creates specific constructs and makes predictions about how the world works based on those constructs. Clearly each individual is unique in the way that he/she construes the world and personality will therefore change depending on ongoing experiences.

There are some constructs that are central to the individual's sense of identity and, when other individuals ignore these, this can cause a great deal of distress to the individual. Other constructs are less important. Hostility is an important consequence of the imposition of constructs upon one another.

In the 1980s there was a view that personality traits result from differences in learning experience and that the behavior changes according to the situation in which individuals find themselves. However there is a poor correlation between behavior or attitudes in one situation compared with another and the most likely reality is the interaction of the situation with the personality.

Genetics and other Influences on the Development of Personality

The risk of developing psychopathology can be considered under the following headings:

1. demographic factors
2. psychosocial factors
3. biological factors
4. genetic factors
5. family environment
6. external environment.

To distinguish clearly between temperament and personality disorder, temperament refers to those characteristics which are found normally distributed in normal individuals, which also have genetic heritability, such as people who are sociable, those who are shy, those who are irritable, and those who are placid. It is only when these traits are maladaptive and cause problems to individuals in their social, occupational, and relational functioning that they are regarded as maladaptive and part of personality.

With respect to the pathogenesis of borderline personality disorder, Torgerson and coworkers have conducted a series of twin studies to estimate the way genes and environment influence personality structure. Twin data allow the estimation of the genetic correlation between two traits and the way that these two traits may share the same genetic predisposition. Factor analysis can then be used to determine traits

such as anxiousness, submissiveness, effective ability, cognitive dysregulation, social avoidance, suspiciousness, or narcissism. These studies show that the environment has a substantial effect on personality, accounting for 50% of the variance seen.

It is clear that a single factor can rarely account for the variance between the emergence or any inhibition of a psychiatric disorder. Genetic factors seem to be of particular significance. These are then influenced by numerous other factors. For example, the following factors are regarded as significant in an individual who has been removed from his/her birth family in childhood.

1. genetic influences
2. early separation from parents
3. early childhood environment prior to that separation
4. multiple placements in residential care, rather than in any one establishment
5. physical abuse in residential establishments and other settings
6. emotional abuse in residential establishments and other settings
7. sexual abuse in residential establishments and other settings
8. poor family support on leaving care
9. traumatic experiences in adult life.

Genetic and environmental factors interact in complex ways to influence the risk of personality disorder. Available genetic observations about twins, adoptees, and families are explained by the hypotheses that quantitative inheritance of underlying personality dimensions influences the risk of personality disorder, rather than positing separate inheritance of personality disorder subtypes. More than one-half of the variance in the four major personality traits is inherited.

Temperament traits determine one's susceptibility to specific neurochemical processes, leading to individual differences in basic emotions in biased learning. These antecedent temperament factors, along with the systematic cultural bias and random life events, critically influence character development, which is represented as the interaction between internalized concepts about the self and the external world. Various temperamental types differentially affect one's risk of immature character and personality development. Some configurations (most with high reward dependence) protect against personality disorders, whereas some increase this risk (e.g., the explosive or borderline profile with low reward dependence, high novelty-seeking, and low harm avoidance).

Average scores on the temperament dimensions do not protect against maladaptation and immaturity. People with average temperament traits have an average, not a decreased, risk of personality disorder. Similarly, extreme temperament variants do not necessarily indicate personality pathology. They are expected to be associated with long-term personal, social, or occupational impairments that warrant the personality diagnosis, only when accompanied by low character traits, in other words, poorly developed character is what makes some behavior traits maladaptive and increases the risk of personality disorders. An individual high in novelty-seeking and low in harm avoidance may have an impulsive personality disorder if he/she is low in self-directedness and cooperativeness, or maybe an energetic business executive or an inquisitive scientist without personality disorder, if he/she is self-directed and cooperative. Mature character traits, i.e., mature concepts about oneself in the external world, optimize adaptation of temperament, i.e., basic emotionality to the environment, by reducing discrepancies between one's emotional needs and norm-favoring social pressures. In personality disorder, immature character traits and extreme temperament configurations mutually perpetuate each other.

Behavioral geneticists have demonstrated that the effect of sociocultural factors on personality is less specific than that of genetic factors and the definitive influence is success in adaptation, rather than formal personality style. This is consistent with recent findings about the importance of family and local culture and character development. The family environment does not influence temperament, but explains 35% of variability of character traits. Hence psychosocial disorganization in the rearing environment of a child substantially influences the risk of personality disorders. This is essential for preventive strategies, as even temperament configurations with a high risk of personality disorder may be overcome in homes and communities that provide security and limit behavior in a warm, compassionate manner, encouraging self-directed choice and respect for other people.

The potential role of a child psychiatrist, therefore, in identifying children with the antecedence of antisocial personality disorder is very important. A critical task is to separate this heterogeneous group, so that those who are most at risk of developing antisocial personality characteristics become the focus of intervention. Since Robins' classic follow-up of children referred to a clinic for conduct problems, numerous studies have shown that the persistence and pervasive, aggressive, and destructive behaviors seen before the age of 11 are strongly associated with the persistence of antisocial behaviors through adolescence and into adult life. Robins described that the

risk extends far beyond antisocial behaviors to unstable relationships, unreliable parenting, and underachievement in education and at work. This broad consolation of difficulties is reflected in DSM-IV antisocial personality disorder. Children who do not have conduct problems are very unlikely subsequently to develop antisocial personality disorder, which is rare without a history of conduct problems.

Conduct disorder is a specific diagnosis within DSM-IV which requires antisocial acts generally seen in older children and adolescents. The available research unfortunately does not yet tell us whether differences in parenting or associated features of childhood conduct problems are predictive of distinctive adult outcomes.

It is important to clarify that psychopathy refers to the constellation of traits of deceitfulness, lack of remorse, and failure to learn from previous experiences, as well as callous disregard for others, and when these traits run together, we are discussing a severe form of personality disorder, known as psychopathy. Other individuals with fewer traits may meet the criteria for a personality disorder, but not at the same level of severity, thus psychopathy specifically refers to severe personality disorder, with a far greater number of traits pertaining to that personality disorder type.

Although 50–80% of convicted offenders have DSM-IV antisocial personality, a much smaller group of 15–30% are judged to have characteristics such as grandiosity, callousness, deceitfulness, shallow affect, and lack of remorse. These individuals are much more likely than other offenders to have a history of severe and violent offenses and they may also have a distinctive deficit in interpersonal sensitivity. They are thought to have a severe disturbance of personality structure, also known as psychopathic personality disorder. In addition, compared with other offenders, adults with psychopathic disorder have reduced autonomic responses to distress cues, suggesting a biological determinance to psychopathy. Unfortunately, no studies have yet tested the continuity between child and adult psychopathic traits by following these children into adult life.

It is usual that the universal traits are present in all people in different degrees. It is important to clarify that these personality traits can be measured in normal individuals, and do not represent a personality disorder. It is only when they are present in sufficient numbers and with a sufficient degree of severity that the diagnosis is made continuous.

In general, three aspects of personality change substantially with age. Novelty-seeking decreases by 18%, thus older individuals are less impulsive, perhaps more reflective, less rule-breaking, more orderly and less quick-tempered, and more stoical. Cooperativeness increases markedly in most children during school age and then increases by 12% on average after age 18, and self-directedness increases markedly in most people during adolescence and young adulthood, increasing on average by 9% after the age of 18. The decreasing prevalence of personality disorder with age is attributable to increased development of both self-directedness and cooperativeness, as the individual gets older. The additional tendency for novelty-seeking to decrease with age explains why people with impulsive personality disorders show more improvement than those with anxious or eccentric personality disorders.

The best-documented finding about changing deviant behaviors is the remission of criminal behaviors of an individual with antisocial personality disorder. These individuals nearly always remain impulsive, are novelty-seeking, risk-taking, low harm-avoidant, and aloof, but become mature enough to maintain work and family life in a stable manner, after the age of 30.

Gradually links are being established between core personality disorder traits and some genetic developmental mechanisms. This will hopefully shed light on the task of identification and differentiation of abnormal personalities. Research is increasingly understanding of different factors, including innate dispositions, neurodevelopmental organization, neurocognitive architecture, critical social transitions, and repeated stress episodes on an individual's vulnerability to developing personality disorder. Hopefully, the advances in psychometric detection of the most salient clinical profiles, within each of the personality subtypes, together with the refinement of the neurocognitive and neurohormonal data, will produce better solutions.

The Genetics of Criminality

Criminality, like other aspects of psychological characteristics of individuals, appears to be significantly inherited. The average heritability of psychological traits seems to be 50%, based on simple measurements, and possibly 70%, when based on estimates of the stable components of the traits, i.e., those that remain stable after repeated measurement. A highly consistent and stable trait like intelligence quotient (IQ) has a heritability on the order of 75% for single measurements, rising to 85% when corrected for instability. IQ may be relevant to criminality because we know that the mean IQ of prison inmates and adjudicated delinquents is somewhat lower than the average population. However, it is possible that some of the brighter offenders are not

included in these averages, because they have avoided being caught. For traits of personality, temperament, and interest that seem specifically relevant to criminality, we can estimate that perhaps 50–70% of the stable variance is genetically determined within the general population. Somewhat less than this, 30–40% among the population are now at high risk for delinquency and crime.

Measurement of Personality Disorder

Personality disorders are felt to differ from the normal variation only in terms of degree. Thus the personality traits of some individuals are sufficiently maladaptive and abnormal to constitute a personality disorder. Catell identified 20 000 words describing personality. Using factor analysis he derived 16 first-order personality factors, his 16 PF questionnaire. Second-order factor analysis resulted in the trait dimensions similar to those of Hans Eysenck. These are sociability, extroversion and introversion, anxiety, and intelligence. Eysenck looked at fractionalities of rating scale data. This yielded orthogonal dimensions, assumed to be normally distributed, of neuroticism, stability, extroversion, introversion, psychoticism or stability, and intelligence. Personality inventories were used to measure these traits, namely the Maudsley Personality Inventory (MPI), which was superseded by the Eysenck's Personality Inventory (EPI), finally superseded by the Eysenck's Personality Questionnaire (EPQ), which measured psychoticism.

The Minnesota Multiphasic Personality Inventory (MMPI) was derived through a process of empirical construction. It was devised as a clinical tool to differentiate between abnormal personalities, but has subsequently been used with normal populations. It consists of a total of 550 statements to which the interviewee responds with a reply of true or false, or cannot say. The MMPI measures traits and is widely used. It appears to be of considerable value in the study of clinically abnormal personalities, but interpretation by an experienced psychologist is required. The scales, which include paranoia, schizophrenia, and hypomania, should be regarded as indicative of the presence of specific personality attributes, rather than of an axis I diagnosis. It is also used in candidate selection and prediction procedures, but is more of value in a clinical setting.

The Personality Assessment Schedule (PAS) was developed in 1976 and has been used to classify personality disorders. This is a hierarchical system in which the personality category that has the highest score for social impairment becomes the named personality disorder. Other major categories which achieve clinically significant scores can be mentioned in the diagnostic description. Patients who do not reach the scores necessary for diagnosis of personality disorder may still attain the level required for personality difficulty and be coded as such. Severity can also be assessed using the system of Tyrer and Johnson.

Cluster analysis has shown that the four major types of personality disorders can be identified from the PAS. Table 2 sets out the choice of instruments used to measure the aspects of personality disorder. In forensic populations, the one that is most predictive of measuring risk of recidivism is the Hare PCL-R.

Personality in Old Age

As people age, they tend to become more introverted. To the extreme level, this can result in the Diogenes syndrome, in which the elderly recluse lives a limited life in advanced squalor with extreme hording of rubbish. It may be that chronic alcohol misuse and chronic frontal lobe dysfunction may play a part in this condition. Characteristically, the syndrome is

Table 2 Reasons for selecting the Personality Assessment Schedule or other instruments in research studies

Purposes which may justify selection of PAS	*Purposes which suggest the use of other instruments (preferred choice in brackets)*
Need to assess premorbid personality	Need to assess current personality functioning (SCID-11)
A population that is unlikely to tolerate an assessment lasting longer than 30 minutes	Compliant population that is predominantly within normal or mildly abnormal range (SNAP or DAPP-BQ)
Significant Axis I comorbidity	Quick assessment for ICD-10 diagnosis (SAP)
Wish to record personality across severity range	Full assessment for ICD-10 and DSM-IV diagnosis (IPDE)
Longitudinal study requiring multiple assessments over a long time period	Forensic use with special attention to reoffending (PCL-R)
Studies in which either informant or patient may be required to complete assessment	Rapid screening instrument for DSM personality disorders (Iowa Personality Disorder Screen)

SCID-11, Structured Clinical Interview for DSM-IV Axis II personality disorders; SNAP, Schedule for Nonadaptive and Adaptive Personality (Clark *et al.*, 1996); DAPP-BQ, (Dimensional Assessment of Personality Pathology-Basic Questionnaire (DAPP-BQ) (Schroeder *et al.*, 1992); SAP, Standardized Assessment of Personality (Mann *et al.*, 1981; Hare Psychopathy Check List – Revised (Hare, 1991); Iowa Personality Disorder Screen (Langbehn *et al.*, 1999).

unaccompanied by any psychiatric disorder to account for the state in which the patient lives. In the UK, the Mental Health Act cannot be used in the absence of a mental disorder. Instead the Public Health Act may be used to deal with these situations if required. Unfortunately, as with other disorders, in old age the prognosis is usually very poor, with almost inevitable relapse. Although in the initial phases, day care may help, institutional care is often the outcome, with the individual being transferred from home into such an institution as the only means of managing the public health problems.

Treatment and Management of Personality Disorders

Psychosocial Treatments

Dynamic psychotherapy In the past, psychoanalysts, such as Jung and Freud, were treating neurotic disorder with associated personality pathology, mainly from the cluster c group. Since the days of these giants, however, no scientific evidence has emerged to show that dynamic psychotherapy is superior to other forms of psychotherapy. A formal evaluation of two forms of dynamic psychotherapy, namely short-term dynamic psychotherapy and brief adaptational psychotherapy, was carried out by Winstone and colleagues in 1991, but excluded patients with borderline, narcissistic personalities. No difference was shown between treatments, but both treatments were better than a waiting-list control group, suggesting that this treatment may have some value.

Research in the past has focused primarily on the management of patients with borderline symptomatology, as these are the patients commonly presenting in clinical practice. Assessment is always difficult, as personality traits tend to be egosyntonic (i.e., the patient does not regard his/her coping style as maladaptive). Patients may not be aware of symptomatology and therefore not complain. It is essential that multiple sources of information are used, including an informant who has known the patient for a considerable time. In order for the diagnosis to be made, personality traits should be enduring and not transient, be pervasive across social situations, and be early in onset and cause distress to the patient or impairment of social functioning.

In a controlled randomized trial, Bateman and Fonagy compared the effectiveness of 18 months of a psychoanalytical-oriented day hospitalization program with routine general psychiatric care for patients with borderline personality disorder. Patients randomly assigned to the day hospital program showed a statistically significant improvement in depressive symptoms and better social and interpersonal functioning, as well as a significant decrease in suicidal and self-mutilatory acts on the number of inpatient days. Although Bateman and Fonagy showed impressive maintenance of treatment effects in an 18-month follow up, this study lacked a treatment manual and therapists' adherence ratings.

Nevertheless, psychotherapy or intensive psychoanalytical psychotherapy has been considered by many psychotherapists to be the treatment of choice for individuals with borderline personality disorder. The duration of therapy varies between 2 and 7 years and treatment consists of the interpretation of the transference and primitive defense mechanisms, the neutrality of the therapist, and consistent limit-setting. Attention is focused on the present, rather than interpreting childhood experience. An alternative is supportive psychotherapy, which aims to strengthen a patient's adaptive functioning through education, suggestion, and facilitating into personal relationship. Interpretation and transference defense mechanisms and regression independence are avoided, since they are considered likely to lead to suicide or other forms of acting out.

Group psychotherapy Group psychotherapy has been traditionally avoided, particularly in the borderline group, as these patients are considered to be too demanding and disruptive to other group members. Gentle confrontation delivered by the group, however, is considered to be effective, rendering egosyntonic traits more egodystonic. This works by letting individuals know their effects upon other individuals. There is no evidence specifically to recommend group therapy over individual therapy. However, therapeutic communities have operated in the healthcare system since their introduction in the 1950s. Patients who are referred are accepted primarily on the basis of their behavior and then acceptance by the democratic therapeutic community. Studies at the Henderson Hospital, Sutton, UK, which primarily treats individuals with severe personality disorders, used instruments to record personality disorders according to the standard diagnostic systems, i.e., DSM-IV and the personality disorder questionnaire. Individuals tend to have at least four separate personality disorder diagnoses, suggesting that their personality disorders are severe. The treatment given is group psychotherapy and stays variable, but lasts for around 7 months. There have been no randomized controlled trials to study the outcome of therapeutic community intervention, however, as there are major difficulties, including ethics, a lack of objective outcome measures, resistance from the field, or reluctance to compare treatments.

In the course of working among a therapeutic community in an open forensic unit in Bradford, UK, over a period of 8 years, one of the authors (JF) observed several patients with severe personality disorder mature and improve in all aspects of the function in that environment. Clearly, however, these observations are anecdotal and this appears to be the level of the evidence.

Cognitive analytical therapy This was first described by Ryle in 1997. It is concerned with describing different self-states and helping patients to identify "reciprocal role procedures." These are patterns of relationships which are learned in early childhood and are relatively resistant to change. The patient is taught to observe and try to change damaging patterns of thinking and behavior, which relate to these self-states, and to become more self-aware. The therapist gathers information about the patient's experience of relationships and the different states the patient experiences. Any accounts of transference reactions experienced by the therapists are considered as useful data as they may represent identification with the patient or some reciprocating response to the patients' overt or covert behavior. Having identified and labeled these, countertransference (i.e., negative feelings toward the patient engendered in the therapist) is reduced to maintain a working alliance with the patient. The therapist's task is to help patients reliably recognize these self-states and to encourage them to become aware of them without dissociating, i.e., psychologically switching their memory off. Although there are no published studies to compare with other psychotherapies, initial work has shown some promising outcome.

Dialectical behavior therapy This is a manualized treatment program, particularly for patients with borderline personality disorders. The patients have weekly individual psychotherapy and group psychoeducation about behavioral skills. They receive telephone consultation with their therapist, who remains in 24-h contact with the patient. The treatment consists of teaching a variety of problem-solving skills, helping patients to regulate emotion, tolerate distress, and validate their own perceptions. They also develop behavioral and psychological versions of meditation skills. Patients are encouraged to observe, describe, and participate in events without separating themselves from what is happening. This encourages them to take a nonjudgmental approach to events and interactions and to do what works, rather than what they feel might be the right thing to do. Again, the evidence base for this intervention does not involve controlled studies.

Cognitive-behavioral therapy Linehan and coworkers randomly allocated cognitive-behavioral therapy and "treatment as usual" over a period of 1 year to chronically parasuicidal borderline patients. During that year the cognitive-behavioral therapy group had fewer and less severe incidents of parasuicide and fewer inpatient days, suggesting benefit in this disorder. However, it must be stressed that cognitive therapy for personality disorder remains experimental in approach. It does however aid the therapist in understanding this group of diverse patients to provide a framework in which to formulate problems and interventions.

Particularly in relation to the treatment of dangerous severe personality disorders, a Home Office review is trying to distinguish between treatments that have proven to be effective for men and women. This relies heavily on a "what works" evidence base, which has not been fully established. The evidence base includes 25 studies of cognitive behavioral psychotherapy, eight studies of dialectical behavior therapy, and five studies of cognitive analytical therapy. There were also 32 studies of pharmacological treatment, 35 studies of psychodynamic psychotherapy, ten studies of tricyclics and two of physical approaches to treatment. There were no recommendations for a specific treatment approach deriving directly from the research evidence.

Inpatient treatment in general psychiatric hospitals Currently, long-term admissions for patients suffering borderline personality disorder are not encouraged. The risk of hospitalization to the patient includes stigma, disruption of social and occupational function, loss of freedom and hospital-induced behavioral regression. Many therapists draw up contracts between the patient and care team to improve outcome. The treatment contract should incorporate agreement by all involved parties, specific focused achievable goals and strategies to achieve these and the specific responsibilities of patient and staff, and provision of the minimum degree of instruction necessary. Patients should forgo their usual means of managing intolerable feelings, such as self-harm, and alternative strategies would be provided. Positive reinforcement of desirable behavior is preferable to sanctions, which should not be drawn up to resolve punitive wishes by staff toward the patient. This should be strictly enforced but would have room for negotiating modification. An alternative approach is a brief admission at the time of crisis, but once admitted, it may be difficult to avoid the hazards listed above.

Pharmacotherapy

Placebo-controlled drug trials amongst those with personality disorder show small specific drug effects, as well as large placebo effects. There is no evidence for large treatment effects to date.

Neuroleptic drugs Low-dose neuroleptic treatment has been shown to be beneficial, particularly in the management of borderline personality disorder in a majority of trials. Low-dose flupenthixol reduced the number of suicide attempts by 6 months, compared to placebo mianserin in a mixed group of parasuicidal personality disorder subjects. Low-dose neuroleptics can improve a broad spectrum of neurotic symptoms, as well as reducing behavioral dyscontrol and the numbers of suicide attempts compared to placebo.

Tricyclic antidepressants Patients with borderline or schizotypal personality disorder improve with tricyclics on rating of depressed mood, impulsive and manipulative behavior. There is a significant potential however for paradoxical effects and rage reactions. They are not recommended in the management of personality disorders, unless there is a comorbidity of major depression. Depression complicated by personality disorder is only half as likely to respond to tricyclic drug treatments compared to poor major depression.

Monoamine oxidase inhibitors If there is a history of childhood hyperactivity, there is some evidence that patients with borderline personality disorder may respond to these drugs.

Selective serotonin reuptake inhibitors (SSRIs) Disruption of the serotonergic system is implicated in depression, impulsivity, and obsessive compulsion. There is some evidence that fluoxetine at doses of 20–80 mg per day can result in improvement in depressed mood and impulsivity, as well as reducing self-harm, while sertraline, used in impulsive and aggressive patients, has resulted in some improvement in overt aggression and irritability from the fourth week of treatment. However, long-term studies have not been carried out.

Lithium This may be helpful in a small number of patients with various personality disorders, particularly with affective features, or a family history of affective disorder with alcoholism. In male convicts with a pattern of recurring, easily triggered violence, a marked reduction in fractions resulted from the treatment with lithium, again over a short period of time.

Carbamazepine Reducing passivity, particularly in behavioral dyscontrol, results in aggression. This is in the absence of epileptic organic features.

Benzodiazepines These are contraindicated because they disinhibit, induce rage reactions, and promote dependence and misuse.

Psychostimulants It has been suggested that individuals with an early history of attention-deficit hyperactivity disorder, which has been responsive to methylphenidate (Ritalin), may respond in adult life to the prescription of psychostimulants, such as dexamphetamine and pemonine. However, because of the psychotogenic effects and addictive properties, extreme caution should be used.

Conclusions in Respect of Therapies

Despite the fact that there are several controlled trials involving psychotropic drugs and placebos, in the treatment of personality disorder, none showed full efficacy in the sense that the treatment is independent of comorbidity. The treatments are not superior in efficacy to placebo and need to show lasting efficacy for a period of at least 6 months because of the enduring nature of personality disorder.

Ideally, in randomized trials, the outcome of personality disorder should be measured directly by assessing personality status before and after treatment and also after long-term follow up. This is clearly a long-term and difficult process.

With reference to "what works" evidence, the therapeutic community model had the most promising evidence base in this poor field. There was some evidence that psychodynamic day hospital-based programs with highly structured therapeutic programs had promising evidence of effectiveness to treat poorly functioning self-harming, borderline patients. Short-term gains were found with the DBT process to reduce self-harm in higher-functioning female outpatients with borderline personality disorder. The evidence for pharmacological interventions was very poor; also SSRI antidepressants might ameliorate symptomatology and anger, and brofaramine (monoamine oxidase inhibitor) may ameliorate avoidant personality disorders and symptoms of social anxiety.

Outcome of Personality Disorder

Unfortunately, individuals with personality disorder show a high morbidity and mortality. The standardized mortality ratio for the 39-year age group is six times that of normal individuals, similar to the rise in people suffering from major functional psychoses, such as schizophrenia. Sufferers have high rates of

comorbidity, with both axis I and axis II conditions. Response to treatment of the axis I disorder is worse in the presence of personality disorder and patients are at high risk of suicide.

In borderline patients treated with psychotherapy, the aim and support of psychotherapy may be to reduce suicidal behavior and impulsive acts while they are awaiting remission, since the long-term prognosis of this disorder is good. Fifteen years after diagnosis, of 100 borderline patients, 75 were no longer diagnosed as borderline, with reduction of symptomatic behavior on all scales and clear functional improvement. However, there remains a high risk of suicide in this group, with 8.5% completing suicide in the 15-year follow-up period. Those patients with chronic depression, good motivation, psychological mindedness, low impulsiveness, and stable environment are the most responsive to treatment.

With regard to those patients suffering from antisocial personality disorders, there is a significant association between the ability to form a relationship with the therapist and treatment outcome. In settings such as the prison, or military settings, confrontation with peers may change social behaviors and prevalence decreases with increasing age. Schizotypal personality disorder remains relatively stable over time. A small proportion (5–10%) go on to develop schizophrenia. Some other types of antisocial and borderline personality disorders tend to become less evident with age, although this is less true with the obsessive-compulsive personality and schizotypal personality disorder.

See Also

Forensic Psychiatry and Forensic Psychology: Assessment; Suicide Predictors and Statistics; Multiple Personality Disorder

Further Reading

Adlington R (1925) *A Book of Characters*. London: George Rutledge.

American Psychiatric Association (1994) *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*, 4th edn. Washington, DC: American Psychiatric Association.

Basant KP, Anne DH (1998) Revision notes in psychiatry. In: *Personality Disorders*, pp. 336–351. London, Sydney and Auckland: Arnold Publications.

Campbell SB (1995) Behaviour problems in preschool children: a review of recent research. *Journal of Child Psychology and Psychiatry* 36: 113–149.

Chiesa M, Bateman A, Friis S, Wilberg T (2002) Patient characteristics, outcome and cost benefit of hospital based treatment for patients with personality disorder: a comparison of three different programmes. *Psychology and Psychotherapy* 75: 381–393.

David TL (1995) *Anti-social Personalities*. Hillsdale, NJ: Lawrence Erlbaum.

Dunn J, Deater-Deckard K, Pickering K, O'Connor TG, Golding JG (1998) Children's adjustment and pro-social behaviour in step-, single-parent and non-stepfamily settings: finding from a community study. *Journal of Child Psychology and Psychiatry* 39: 1083–1095.

Fergusson DM, Horwood LJ (1998) Conduct problems and later life opportunities. *Journal of Child Psychology and Psychiatry* 39: 1097–1108.

Gelder MG, Lopez-Ibor JJ, Andreasen N (eds.) (2000) *Genetics and Personality: Summary, New Oxford Textbook of Psychiatry*, vol. 1. Oxford University Press.

Hare RD (1991) *The Hare Psychopathy Checklist*, revised. Toronto, Canada: MultiHealth Systems.

Kaplan BS, Sadock VA (2000) *Personality Traits and Disorders, Comprehensive Textbook of Psychiatry*, vol. 1, 7th edn., pp. 821–822. Lippincott/Williams & Wilkins.

Kaplan BS, Sadock VA (2000) *Psychobiological Summary of Personality Disorder, Comprehensive Textbook of Psychiatry*, vol. 2, 7th edn., pp. 1755–1757. Washington, DC: Lippincott/Williams & Wilkins.

Monahan J, Steadman H, Silver E, *et al.* (2001) *Rethinking Risk Assessment: The MacArthur Study of Mental Disorder and Violence*. New York: Oxford University Press.

Plomin R (1994) Genetics and children's experiences in the family. *Journal of Child Psychology and Psychiatry* 36: 33–68.

Roy P, Rutter M, Pickles A (2000) Institutional care: risk from family background or pattern of rearing? *Journal of Child Psychology and Psychiatry* 41: 139–149.

Tyrer P (2000) *Personality Disorders, Diagnosis, Management, Course*, 2nd edn. Heinemann.

Tyrer P, Duggan C, Coid J (2003) *Ramifications of Personality Disorder in Clinical Practice*. London: Royal College of Psychiatrists.

Warren F, *et al.* (2003) *Review of Treatment for Severe Personality Disorder*. Home Office.

World Health Organization (1992) *Tenth Revision of the International Statistical Classification of Diseases in Related Health Problems (ICD-10)*. WHO, Geneva.

Multiple Personality Disorder

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Multiple-Personality Disorder in ICD-10

The *International Classification of Diseases*, 10th edn (ICD-10), introduces the section on dissociative (conversion) disorders with the statement that "the common theme shared by dissociative (or conversion) disorders is a partial or complete loss of the normal

integration between memories of the past, awareness of identity and immediate sensations, and control of bodily movements." Multiple-personality disorder, so designated in ICD-10, while recognized, is noted to be rare but "the essential feature is the apparent existence of two or more distinct personalities within an individual, with only one of them being evident at a time. Each personality is complete, with its own memories, behavior, and preferences; these may be in marked contrast to the single premorbid personality." This manual notes that, though generally rare, the common form involves two personalities, one of which is dominant; neither have access to the memories of the other and are almost always unaware of each other's existence. Switching from one state to another is usually abrupt in the first instance and associated with trauma, though subsequently often limited to stressful events or occurring during therapeutic sessions. The extent to which iatrogenic or culture-specific factors may influence the development of the disorder is therefore well recognized.

Dissociative Identity Disorder in DSM-IV

In the *Diagnostic and Statistical Manual*, 4th edn (DSM-IV-TR), dissociative disorders are given their own separate category and multiple-personality disorder is referred to as "dissociative identity disorder." In this classification, the diagnostic criteria are more specific and include the presence of two or more distinct identities or personality states that recurrently take control of the behavior of the individual. Inability to recall important personal information that is more extensive than that which can be explained by ordinary forgetfulness is also necessary. An additional requirement is the exclusion of substance abuse or a general medical condition that might account for the disorder/behavior. Here also the disorder is seen as reflecting "failure to integrate various aspects of identity, memory, and consciousness."

A Brief History of the Concept of Dissociation and Multiple Personality

The disorder has to be seen in the context of the evolution of the concept of dissociative disorders in general. The origins of the idea evolved largely during the nineteenth century, when the first dynamic psychiatrists became interested in a wide range of phenomena, including hypnosis and psychic phenomena such as automatic writing, crystal gazing, somnambulism, and so on. The notion that psychological trauma predisposed to these conditions became common. Janet suggested that "psychological automatisms," each representing a complex act and preceded by an idea and accompanying a motion, form the elementary structures of mental life. Normally integrated into a single stream of consciousness, such automatisms could be separated from the rest and function outside awareness and normal voluntary control.

Freud and his disciples quickly replaced the earlier dynamic theories, emphasizing sexuality and hostility, and the notion of repression and the significance of dreams became more influential.

The concept of dissociation however became important again in the second half of the twentieth century and it did become increasingly recognized that some degree of dissociation is a normal phenomenon based on the observation that many mental functions occur unconsciously and automatically.

Early versions of the *Diagnostic and Statistical Manual* were heavily influenced by Freudian psychodynamic theory and its subsequent history. Successive editions have been complex and reflect the considerable debate about the notion of dissociation and related phenomena in general. In the 4th edition, the requirement for amnesia as a diagnostic criterion was reintroduced.

Early reported cases of multiple personality were rare, but reports became much more common in the second half of the twentieth century. Books and movies depicting cases brought the phenomenon to widespread attention, examples include "The Three Faces of Eve" and "Sybil."

By 1990, over 20 000 cases had been reported in the USA. Further media attention, including television appearances, may have contributed to this proliferation.

Medical–Legal Repercussions of Multiple-Personality Disorder

It was during this epidemic that the potentially serious implications for the criminal justice system became apparent. Individuals accused of serious crimes were able to claim that some personality other than their normal self had been responsible for their behavior.

The possibility of malingering or conscious dissimulation makes the forensic evaluation of a dissociative disorder difficult to assess and to defend. Although various structured interviews and diagnostic instruments have been developed, it remains impossible to be sure whether an accused person's claim of amnesia is genuine or dissimulated. Furthermore, evidentiary questions such as the admissibility of hypnotic or amylobarbital interviews and the independence

of testimony by different "alter" personalities have understandably also proved problematic.

At the height of the apparent epidemic, a number of high-profile criminal cases brought the problems into sharp focus. The "Hillside Strangler" (Kenneth Bianchi), along with his cousin, was accused of ten rape-homicides in California in the late 1970s. His defense attorney argued that the crimes were committed by his alter ego and attempted to support this with evidence of his highly hypnotizable nature. His claim was contradicted by other evidence suggesting that he had simulated hypnosis and the identification of inconsistencies in the presentation of his supposed alters. Moreover, there was no independent corroboration of these alters prior to the offenses. Bianchi's history of using bogus credentials to practice as a psychotherapist and acquire psychological knowledge undoubtedly contributed to his ultimate conviction. Bianchi also read a great deal about multiple-personality disorder, though some have noted that "genuine" patients, with no legal involvements, often do so as well.

The use of multiple-personality disorder in support of an insanity defense to serious crimes including murder revolves around two basic issues: the reliability of the diagnosis and the relevance of the diagnosis to the insanity defense.

However, in the USA, a number of disparate judicial decisions reflect the controversies and confusion surrounding the diagnosis and elaborate on the ways in which the basic issues have been approached. Behnke identified three types of legal analysis in these cases. In the first kind, the analysis depends on the assumption that the accused's alter or secondary personality was "in control" of the individual's behavior at the time of the offense. A second type rests on the idea that each personality alter may or may not be criminally responsible for the crime and each must be assessed using the appropriate insanity test. Each alter must be assessed independently of all the others. The third approach focuses on whether or not the dominant personality fulfills the test of criminal responsibility or the "host" personality. Most of the cases he analyzes represent variations on these basic types.

Central to these legal arguments is the psychological and philosophical understanding of what constitutes "a person." The approaches which regard each individual "alter" and the host personality are in some views inappropriate. Behnke, for example, points out that elevating "alter" personalities to the status of persons ignores the fact that only persons can be conscious or unconscious. Moreover, only persons can be criminally responsible and so a court should assess the mental state of the person accused and the nature of the act. On this analysis, alters are mental states and should be evaluated as such. The fact that an individual may have amnesia for a criminal act committed in such an abnormal state would not automatically exonerate the person. The mere presence of a dissociative disorder even in the extreme of a dissociative identity disorder would not in itself be grounds for a defense of insanity. Spiegel has pointed out that, although amnesia is an essential requirement for the diagnosis of dissociative identity disorder, the memories may be easily accessible through hypnosis and other techniques. Failure to be aware of, or think through, the consequences of a criminal act is not a defense; failure to access dissociated aspects of the personality is not in itself a defense either. Thus, the usual insanity standard works fairly satisfactorily with individuals with dissociative identity disorder because the focus of the question asked is narrowed to one that can be answered even if only a personality fragment is dominant.

A completely contrary view is offered by Saks, whose analysis regards alter personalities as independent persons and each should be treated independently under the criminal law. The purported "split" in the personality would, according to Saks, represent absence of *mens rea*.

Generally, most courts have not found dissociation sufficient grounds to absolve an accused of criminal responsibility and have held that the whole human being is responsible for the behavior of any part.

Conclusion

Although found in official classifications, the diagnosis of multiple-personality or dissociative identity disorder remains controversial. A considerable level of skepticism exists within the mental health professions, whereas others make the diagnosis frequently and argue that critics are blind to the frequent occurrence of the disorder . Given the degree of contentiousness of the very diagnosis, it is not surprising that the law has often had difficulties in coming to terms with the alleged phenomenon.

See Also

Forensic Psychiatry and Forensic Psychology: Personality Disorder

Further Reading

James D (1998) Multiple personality disorder in the courts: a review of North American experience. *The Journal of Forensic Psychiatry* 9(2): 339–361.

Piper A, Merskey H (2004) The persistence of folly: a critical examination of dissociative identity disorder. Part I. The excesses of an improbable concept. *Canadian Journal of Psychiatry* 49: 592–600.

Piper A, Merskey H (2004) The persistence of folly: a critical examination of dissociative identity disorder. Part II. The defence and decline of multiple personality or dissociative identity disorder. *Canadian Journal of Psychiatry* 49: 678–683.

Stalking

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Introduction

Although no universal definition has been adopted for the term, it can now safely be stated that the obsessional harassment of one person by another – what is commonly called stalking – occurs with some frequency across the world. This review article will focus on four major studies of stalking behavior, which comprise three large-scale national surveys from different continents, and a metaanalysis of 103 studies comprising nearly 70 000 participants. Definitions of stalking will be reviewed, and prevalence rates examined. Characteristics of stalkers, including the gender of the perpetrator, relationship between perpetrator and victim, duration of pursuit, and putative psychopathology of stalkers, will be discussed. Attachment theory will be introduced and used as an explanatory factor for stalking acts committed by previous sexual intimates of the victim. A model for the assessment and treatment of previously sexually intimate stalkers will be put forth.

Different Definitions, Different Prevalence Rates

Three national surveys have now been completed on the nature and extent of stalking victimization. In Australia, 6300 adult female respondents were surveyed in a nationally representative random sampling where stalking was defined as unwanted communication, loitering, following, or watching the same person. Two incidents had to occur against the same victim and the perpetrator had to utilize more than one kind of stalking behavior. The survey did not include a fear condition in the definition. Results indicated that 15.1% of the sample had been stalked at some point in their lives, with 2.4% having been stalked within the last year.

In the UK, a nationally representative sample of nearly 10 000 males and females aged 16–59 years was surveyed on their experience of stalking victimization. Stalking was defined in this study as "persistent and unwanted attention." The definition did not include criteria on behavioral frequency or level of victim fear. Lifetime victimization rate, across gender, was 11.8%. Lifetime rate of female victimization was 16.1%; the male rate was 6.8%. Some 2.9% of the sample reported being victimized within the prior 12 months, again with more females (4.0%) than males (1.7%) reporting being stalked.

The National Violence Against Women survey conducted telephone surveys on 16 000 adult respondents, divided evenly by gender, in 1995 in the USA. In this study, stalking was defined, in part, by a fear condition, where the victim either had to have felt very frightened or feared bodily harm from the perpetrator. This definition, predictably, led to lower rates of observed stalking; lifetime rates of victimization for men and women were 2.2% and 8.1%, respectively. Annual incidence for male and female victimization was 0.4% and 1.0%, respectively. When the fear condition was lessened, victimization rates rose to be roughly equivalent with the two national surveys cited above, with lifetime rates of 4% for men and 12% for women, and annual rates of 1.5% for men and 6% for women.

Spitzberg's recent metaanalysis on stalking and "stalking-related phenomena" represented 103 studies, 108 samples, and 68 615 participants. Across studies, an overall prevalence rate of roughly 21% was found, with a female victimization rate of 23.5%, a male victimization rate of 10.5%, and a female-to-male victimization ratio of 2.5.

It is clear that differences in the way stalking is defined, mainly with regard to behavioral frequency and level of victim fear, lead to discrepant prevalence estimates. However, across three national surveys, when stalking is defined liberally (low levels of fear, or no fear condition, and less stringent behavioral frequency), similar rates are found: lifetime rates of male victimization of 5%, and lifetime rates of female victimization of 15%.

Gender of Victim

Significantly more women than men are victimized by stalking. Although the Australian survey research did not include data on male victims, other results from that country, comprising a random sample of 3700 male and female respondents from the Australian state of Victoria, found that fully 75% of those

reporting stalking were female. Results from the UK were similar, and indicated that approximately three of four (73%) stalking victims were female. The US national survey found that nearly four of five (78%) of the victims were female, and Spitzberg's metaanalysis indicated that three of four victims of stalking are women.

Gender of Perpetrator

An interesting aspect of stalking crimes is that, although most of these acts are committed by male perpetrators, a significant proportion are also committed by females.

Spitzberg found that males comprised four in five of the total perpetrator sample, and the British survey research found similar numbers. However, this work also indicated that, while 90% of the stalking acts against women were committed by male perpetrators, that number dropped to 57% when considering male victims. Similarly, in the USA, nearly 90% of stalking acts were committed by male perpetrators. Again, while 94% of the perpetrators against females were male, 40% of the stalking acts committed against males were female. In Australia, 84% of the perpetrator sample was male. As we will see, stalking is most likely to occur between current or previous sexual intimates; the relatively high rates of female perpetration is evidence of this.

Victim–Offender Relationship

In Australia, women reported that they were most often stalked by strangers: 48% of the Australian sample reported being victimized by someone unknown to them, compared to 41% by a previous partner, and 29% by an acquaintance. In the UK, the perpetrator was either a current or former intimate partner of the victim in 29% of cases, an acquaintance 29% of the time, and a stranger to the victim in 34% of cases. By gender, women in the UK were significantly more likely to be stalked by a stranger than were men. In the USA, men were more likely to be stalked by strangers, though, in contrast, female victims were overwhelmingly more likely to be victimized by current or former partners. Drawing on research from 40 studies, Spitzberg indicated that the clear majority of stalking victimizations occurred from previously sexually intimate relationships, followed by acquaintances, and then strangers (Table 1).

Table 1 Victim–offender relationship

	Sexual intimate/ previous sexual intimate (%)		*Acquaintance (%)*		*Stranger (%)*	
Country	*Male*	*Female*	*Male*	*Female*	*Male*	*Female*
Australia	NA	41	NA	29	NA	48
UK	27	30	36	30	28	35*
USA	30	59**	34	18**	36	23**

NA, not available.
*P significant at 0.10 level; **P significant at 0.05 level.

Duration of Pursuit

The length of time that stalkers pursue their victims suggests, first, that such behavior is often qualitatively different from what might be considered "normative pursuit" of another, at the termination of a relationship, for example. Second, particularly for the previously sexually intimate stalker, the tenacity suggests the depth of the psychological wound and the perpetrator's putative attachment pathology, as well as the lengths the individual will go in his/her attempts to repair these.

The National Violence Against Women survey results indicated that, although roughly two-thirds of victims reported that their stalker ceased the harassment within 12 months, the average duration of pursuit, across victims, was 1.8 years. Those women who had been stalked by a former intimate partner reported a longer duration of 2.2 years. In the UK, roughly one-third of the victim sample was stalked for less than a month, one-quarter for between 1 and 3 months, and one in five victims were stalked for more than 1 year. Although the Australian survey research did not include data on length of pursuit, other research from that country using a stringent definition for the behavior (a minimum of 10 contacts over a minimum of 4 weeks) found a mean duration of pursuit of 12 months, among a sample of 145 mostly male stalkers referred to a forensic psychiatric clinic for treatment. In the large metaanalytic study, mean duration of pursuit, across 108 samples, was more than 22 months.

Research on length of pursuit as a function of victim–offender relationship has not shown consistent findings. As above, the Violence Against Women survey found that intimate partners stalked for a significantly longer period than perpetrators who were not intimately connected to the victim. The British survey research found similar results: 27% of the female victims who had had a previous intimate relationship with the perpetrator were stalked for at least 1 year, compared to 15% of women who were stalked by a nonintimate. Likewise, Mullen and colleagues found that their group of Australian "rejected stalkers," 79% of whom were former partners of the victim, engaged in the longest

absolute duration of pursuit of 41.3 months, though this was not significant at post-hoc analysis. Finally, Purcell and colleagues again in Australia found that previous sexually intimate stalkers engaged in the longest duration of pursuit (mean 16.6 months), compared to nonintimate perpetrators. In contrast, other research has found that "stranger" stalkers pursue the victim longer than previous sexual intimates, while Kropp and colleagues found that duration of pursuit was shortest for strangers, followed by previous sexual intimates, and longest for acquaintances. Further research into this area may help to clarify the relationship between duration of pursuit and victim–perpetrator relationship.

Stalking and Violence

There is a clear relationship between stalking and physical violence, particularly among those perpetrators currently or previously sexually involved with the victim.

In the USA, four in five female victims stalked by a current or former partner were physically assaulted by that perpetrator; 31% were sexually assaulted. Using these numbers, the authors estimated that in comparison to husbands and partners in the general population who do not stalk, current or former partners who stalk their intimate or other are four times more likely to physically assault, and six times more likely to sexually assault the victim.

The random sample survey research in Australia indicated that nearly one in five stalking victims also reported being physically assaulted, and that 2% reported being sexually assaulted. Those victims who had formerly had an intimate relationship with their perpetrator were more likely than all other groups to be assaulted. In the UK, 19% of women reported being physically assaulted by their stalker, compared to 24% of men; one in 10 women reported being sexually assaulted, compared to 3% of male victims. Similar to the research above, female victims who had had a sexual relationship with the perpetrator were more likely to have been physically and sexually abused than females who did not. Male victims, however, were most likely to be physically abused by stranger stalkers. Finally, across 42 studies, Spitzberg found the rate of physical assault among stalkers to be 33%; the rate of sexual violence, across 17 studies, was 11%.

Psychopathology

Although there has been much conjecture regarding the psychopathology of individuals who stalk, no systematic research has administered standardized psychological tests to a sample of stalking offenders (that research is underway in the author's lab). The following represents some of the work that has been done.

Although divergent research exists, there appears to be a significant amount of psychiatric illness among stalking offenders, particularly of personality dysfunction. In a sample of 147 males and females referred for evaluation for stalking-related criminal offenses, Rosenfeld found a 17% rate of schizophrenia, 15% rate of delusional disorder, and just over a 10% rate of mood disorder. Just over a third of the sample met criteria for personality pathology; half of these individuals met criteria for full diagnosis or traits associated with the cluster b disorders of borderline, antisocial, or narcissistic personality. Mullen and coworkers reported that half their stalking sample met criteria for an axis I mental disorder and 50% were personality-disordered. In a sample of 50 pretrial British stalkers, Farnham and colleagues reported that over 50% suffered from a psychotic illness.

Although, the delusionally disordered stalker comprises a portion of the perpetrator sample, this percentage is not as high as was once believed. In a sample of 74 stalkers, Zona and colleagues reported that just seven (9.5%) were diagnosed with erotomania, the subtype most often associated with unwanted pursuit. Mullen and Pathe reported that five of 14 stalkers referred for psychiatric evaluation were erotomanic, and Harmon and coworkers found a roughly similar rate (29%). Finally, among Rosenfeld's relatively large sample of 147 male and female stalkers, 15% met criteria for delusional disorder.

With regard to use of substances, fully 50% of Rosenfeld's (2003) sample of male and female stalkers had histories of substance abuse. Meloy and Gothard found a rate of 70% among their sample, although Mullen and colleagues found that just 25% met criteria for a substance-related disorder.

As above, the absence of standardized psychological testing on a sample of stalking offenders makes it difficult to draw firm conclusions regarding the level and extent of psychopathology. In San Diego, California, this author has evaluated or treated 150 males and females for stalking or stalking-related criminal activity. Data collection, including psychological testing, is being carried out. Although the data have not been formally analyzed, preliminary analyses indicate significant amounts of personality pathology (as measured by Millon Clinical Multiaxial Inventory, 3rd edition (MCMI-III)), particularly narcissistic pathology, and substance abuse, particularly alcohol

and methamphetamine, among this population. The defensive qualities of the narcissism suggest underlying feelings of inadequacy in the stalker, and, by inference, difficulties with attachment.

Attachment

In London in the 1950s, John Bowlby and his colleagues, working from psychoanalytic and ethological principles, created a theory of the way an infant "attaches" to its caregiver. Three early, central postulates of their theory were:

1. Attachment between mother and child is genetically determined.
2. Felt anxiety is the emotional response to separation or threat.
3. Grief occurs at the loss of a loved one.

Mary Ainsworth and her colleagues built on Bowlby's work by demonstrating the role of fear in the attachment behavior of infants. When a child feels strongly attached to his mother, he will explore his environment, acquire new information, and assimilate what he learns into the developmental progression. This feeling of "emotional safety" allows the child to learn, mature, and grow. During times of subjective fear or anxiety, however, exploration behavior ceases, information intake stops, and (most importantly for theories on the motivations of stalkers), the child seeks physical proximity to mother. In this scenario, the felt experience of fear stops exploration and leads to attachment. Thus attachment is a genetically determined behavioral system which ensures physical closeness between infant and caretaker.

Modern attachment research conducted by Bartholomew has identified three pathological types of adult attachment. The individual with a dismissing attachment style has experienced rejecting or unresponsive parenting as a child, and thinks highly of self and negatively of others. The fearfully attached person has had similar experiences with his/her parents as a child, but has negative thoughts about both him/herself and others. These individuals are both desirous of intimacy and fearful of being rejected. The preoccupied style of attachment is characterized by inconsistent parenting in childhood, positive perceptions of others, low self-esteem, and a dependence on others to assuage these feelings. While the dismissing attachment style is conceptually similar to elements of the psychopathic personality, the final two styles – the fearful and preoccupied – have special relevance to theory and research on stalking.

Attachment theory has been applied to research on domestic violence, with interesting results. Kesner and McKenry reported that the attachment styles of both male and female batterers were unique predictors of marital violence. The authors further hypothesized that the anger of the male batterer was an attempt to communicate fear of separation. Babcock and colleagues studied a sample of male batterers and reported that violence in the relationship was most likely to occur when the male partner was insecurely attached. Male subjects with a dismissing attachment style were most likely to use instrumental violence, had the most antisocial personality traits, and were most likely to be violent when their partner became defensive during an argument. In contrast, those male batterers who were categorized as preoccupied in their attachment style were most likely to use expressive (reactive) forms of aggression, and their violence was most likely to occur when the female attempted to withdraw from an argument. Wife withdrawal was only a predictor of marital violence among the preoccupied batterers. The authors hypothesized that the function of the violence among these men served to maintain the wife's proximity.

Assessment

This author is aware of only one other published work on the risk assessment of stalking perpetrators. The following will detail the process of stalking risk assessment used in a forensic outpatient private practice in San Diego, California.

Assessment occurs subsequent to a charge or conviction on a stalking or stalking-related criminal offense. The evaluation attempts to provide answers to three main questions: (1) the extent and nature of the offender's psychopathology; (2) the offender's level of risk for spousal assault, violent, and stalking offense; (3) recommendations to manage the risk level in the community. Following is a list of the battery of psychological tests and self-report instruments utilized in the assessment of persons charged or convicted for stalking or stalking-related criminal activities:

1. history: psychosocial history form (self-report; 37 pages)
2. personality: MCMI-III
3. psychopathy: Psychopathy Checklist Screening Version (PCL SV)
4. instant offense, criminal history: official records
5. substance abuse: Subtle Substance Abuse Screening Inventory (SASSI)

6. attachment: Experiences in Close Relationships Measure – Revised (ECR-R), Relationship Scales Questionnaire (RSQ), Inventory of Personality Organization, risk appraisal: Historical, Clinical, Risk Management-20 (HCR-20), Spousal Assault Risk Assessment (SARA), PCL SV: consideration of stalking recidivism predictors.

New research has been published by Rosenfeld, which comprises the first empirical work on the frequency of recidivism among a stalking population. The author found that among a mixed-gender sample of 148 stalking and harassment offenders, several variables predictive of general and violent reoffense among violent offenders were also predictive among stalkers. These were age, personality disorder diagnosis, and interaction between personality disorder and substance abuse. In contrast, Rosenfeld reported that two strong predictors among other criminal populations – history of violent behavior and previous general criminal history – were unrelated to likelihood of reoffense among stalkers. Finally, the relationship between the stalker and the victim was predictive of reoffense: previously sexually intimate stalkers were the most likely to commit a new crime.

Thus, when a stalking defendant is sent for psychological evaluation, risk levels for general violence, spousal assault, and stalking-specific reoffense are appraised. The PCL SV and HCR-20, a "structured clinical" risk appraisal instrument, are utilized to appraise risk of general and violent offense. The literature on the predictive power of psychopathy is vast; the construct as measured by the original or revised Psychopathy Checklist has been found moderately to predict violence and reoffense among general offenders, sex offenders, and mentally disordered offenders. Although it has been theorized that stalkers as a group will not have high levels of psychopathy (due in part to the theory that these offenders are both fearfully and anxiously attached to their mates), it is likely that those offenders scoring high in psychopathy will be more likely to commit new criminal acts. On the HCR-20, individual subject scores have been found to be associated with inpatient aggression, criminal recidivism, and a history of violence. Further, the instrument's H (for historical) and C (for clinical) subscales have been found to have larger correlations with a number of previous violent charges than those observed for the Psychopathy Checklist or Violence Risk Appraisal Guide. Finally, Douglas and coworkers found that scores on the HCR added incremental validity to subject scores on the PCL SV in predicting violence among 193 civilly committed patients.

To evaluate the likelihood of intimate-partner violence, the SARA, a similar "structured clinical" assessment instrument that has been found to discriminate between recidivistic and nonrecidivistic spousal assaulters, is utilized. Finally, to evaluate the likelihood of stalking-specific recidivism, findings from Rosenfeld's research, mentioned above, are considered.

For each outcome behavior under consideration (general violence, spousal assault, stalking), the offender is given a summary rating of risk, communicated on a three-point ordinal scale (low, moderate, or high). The evaluation process as a whole allows for clear communication between relevant parties (e.g., court, probation) and also aids in the identification of interventions that can be utilized in treatment to lower the offender's level of risk.

Treatment

To treat this population effectively, the motivations behind stalking acts must be understood. The following rests largely on the author's clinical experience working with a previously sexually intimate stalking population. Future research will put these hypotheses to the test.

Clinical evidence suggests that stalkers have often experienced "shaming" episodes, usually at the hands of a parent, in childhood; Dutton has empirically shown this to be the case in a subset of domestically violent men. These experiences led to a conviction in the stalker of personal deficiency, which lasts to adulthood, and is often managed by narcissistic defenses. In his adult relationships, the stalker often chooses partners who play out these early paradigms of being shamed, confirming the individual's early experience. The initial period in the relationship is idyllic and highly romanticized, as the stalker-to-be desperately hopes that this relationship will satisfy his emotional needs. Soon, however, the individual perceives lack of interest in his partner, a fear that can be reality-based, as the partner begins to feel suffocated by the individual's "neediness," or transference-based, as the individual's early experiences color his adult perceptions. Often, it is a mixture of the two. In time, the partner actually begins to detach herself from the relationship, which signals the confirmation of the individual's worst fear: that he is unworthy, inadequate, and deficient. The narcissistic defenses are "pierced" and the partner has "seen" the individual in all his inadequacy; he has been "publicly shamed." These feelings bring the individual back to the original shaming experiences in childhood, and are defended against by rage. The

pursuit of the victim, then, is an attempt by the stalker both to punish the victim for "making" him feel emotions he has long avoided, as well as an indication of his desire for reunification. If he could just rekindle this lost love, perhaps the pain would go away.

Treatment of previously sexually intimate stalkers is done primarily in a single-gender group format; groups meet weekly; individual sessions with each patient are scheduled on a monthly basis. Other types of stalker, such as acquaintance and stranger stalkers, are seen individually, as these are patients who are obstructive to the group process. Psychopathic stalkers, though rarely seen, are initially included in the group, as new research indicates that psychopathy is not associated with the effects of treatment on violence.

Group therapy functions according to a cognitive-behavioral, relapse-prevention model. The focus is on helping the offender gain insight into the emotional, cognitive, and situational precursors to the offense, and on providing him with the skills to manage these "stressors" when they arise in the future. Finally, progress in the group is self-paced, as each offender must complete assignments from the curriculum outside the group, and then present these assignments to the group and receive feedback and suggestions for revision.

The therapist's task in the individual treatment sessions is to provide an environment for the patient to explore early attachment experiences, and losses, with his caregivers, and then to process how these have influenced his functioning in adult relationships. The elicitation of very painful affect is an integral part of this process, as the patient relives early shaming experiences. The hope here is that, in the midst of such painful memories, the patient experiences the therapist as an empathic, caring object, unlike the parental figure who caused the original pain. The patient's shame, then, is tolerated and accepted by the therapist, and is thus rendered somewhat less toxic to the patient. In addition, the therapist's ability to remain with the patient and "not withdraw" during these feelings offers the opportunity for a new "secure" attachment experience. Together, the therapist and patient can examine the old wounds, take their measure, and begin to create new ways of relating to others.

Pharmacological Interventions

Many stalking perpetrators have rightly been considered as obsessional; certainly the tenacity and duration of pursuit is evidence of this. One author has suggested that discrete diagnoses of obsessive-compulsive disorder, though rarely mentioned in the research literature, may be common in this population. At the end of the relationship, and in the months after, levels of anger, hurt, and rejection are at their apex; it is likely that the frequency and intensity of these feelings are related to the likelihood of the stalker's unwanted contact. These feelings often remain during the treatment process and, although they may attenuate over time, are worthy of clinical attention. When an individual in treatment reports perseverative thoughts of the victim, or when there is clinical or behavioral evidence (e.g., breaking of a restraining order) of obsessionality, a referral is made for evaluation of the benefit to the offender of serotonergic medication, as these have been demonstrated to have antiobsessional elements.

Extinguishing Stalking

Although the above paragraphs on treatment interventions may, in time, be shown to be effective in decreasing stalking recidivism, this remains an empirical question. Thus, firm conclusions regarding what extinguishes the behavior are difficult to draw. However, the author's clinical impression, which appears to be corroborated by research, is that after the intense emotions have had the opportunity to "cool off," primarily through the passage of time, though perhaps in the future with the assistance of treatment intervention, stalkers may be less likely to pursue their victim. Indeed, Rosenfeld's research, which indicated that previously sexually intimate stalkers, who can be theorized to hold the most intensely felt emotions toward their victims, were the most likely of the different "types" to commit a new crime, lends some credence to this theory. Additional evidence is found in the fact that the vast majority (80%) of stalkers from Rosenfield's sample who recidivated did so within 12 months. This finding, if it can be replicated across studies of stalking offenders, has implications for sentencing dispositions, wherein a year-long sentence to custody might be used to decrease recidivism among previously sexually intimate stalkers.

Future Directions

This article, and others on the same subject, establishes that stalking is a troubling social phenomenon. Research to this point is only beginning to identify patterns of behavior, and to suggest directions for future work. One clear area in need of explication is the level and extent of psychopathology among this population, achieved through the use of standardized

psychological tests. Similarly, the attachment pathology of these offenders should be researched more closely, to identify its relation to stalking and violence. Additionally, if research is able to demarcate specific types of pathological attachment in individuals who stalk, treatment interventions could be created to attempt to remediate these deficits. Treatment interventions utilized in a case of a preoccupied or fearfully attached stalker, for instance, would likely differ markedly from those utilized in a case of a stalker with a dismissive attachment style. Along this line, research which develops a typology of stalkers, similar to work on domestic violence offenders, would prove helpful. It is possible that stalkers differ not only in their relationship to the victim (stranger, acquaintance, previous sexual intimate) and their style of attachment (fearful, preoccupied, dismissive), but also in their overall level of psychopathology, the extent and frequency of physical violence toward the victim, and the intensity and generality of their antisocial behavior in the community (criminal history). A typology of previously sexually intimate stalkers, perhaps the most prevalent, tenacious, and likely to be violent of all types, is an area in particular need of typology work. Similarly to the research on domestic violence, such research may identify different needs among this subpopulation, which will then aid in identification of the type, intensity, and urgency of treatment interventions. Finally, although Kropp and coworkers are doubtful that an actuarially based risk appraisal instrument, similar to ones developed for sex offending populations, can be created for a stalking population, efforts should be expended to in this area, so that more accurate judgments of recidivism risk, including stalking-specific recidivism, can be made.

See Also

Forensic Psychiatry and Forensic Psychology: Assessment; Personality Disorder; Multiple Personality Disorder; Criminal Responsibility

Further Reading

Australian Bureau of Statistics (1996) *Women's Safety Australia 1996*. Canberra, Australia: Australian Bureau of Statistics.

Bartholomew K (1997) Adult attachment processes: individual and couple perspectives. *British Journal of Medical Psychology* 70: 249–263.

Bowlby J (1958) The nature of the child's tie to his mother. *International Journal of Psychoanalysis* 39: 350–373.

Budd T, Mattinson J (2000) *The Extent and Nature of Stalking: Findings From the 1988 British Crime Survey*. (Home Office research study no. 210.) London: Home Office.

Douglas KS, Webster CD (1999) The HCR-20 violence risk assessment scheme: concurrent validity in a sample of incarcerated offenders. *Criminal Justice and Behavior* 26: 3–19.

Dutton D (1998) *The Abusive Personality*. New York: Guilford Press.

Hare RD (1991) *Manual for the Psychopathy Checklist-Revised*. Toronto, Ontario, Canada: Multi-Health Systems.

Hart S, Cox D, Hare R (1995) *Manual for the Psychopathy Checklist: Screening Version (PCL:SV)*. Toronto, Ontario, Canada: Multi-Health Systems.

Hart S, Kropp P, Hare R (1998) Performance of psychopaths following conditional release from prison. *Journal of Consulting and Clinical Psychology* 56: 227–232.

Kesner J, McKenry P (1998) The role of childhood attachment factors in predicting male violence toward female intimates. *Journal of Family Violence* 13: 417–432.

Kropp PR, Hart SD, Lyon DR, LePard D (2002) Managing stalkers: coordinating treatment and supervision. In: Sheridan L, Boon J (eds.) *Stalking and Psychosexual Obsession: Psychological Perspectives for Prevention, Policing and Treatment,* pp. 138–160. Chichester, UK: Wiley.

Meloy JR (2002) Pathologies of attachment, violence, and criminality. In: Goldstein A (ed.) *Handbook of Psychology,* vol. 11. New York: Wiley.

Mullen PE, Pathe M (1994) Stalking and the pathologies of love. *Australian and New Zealand Journal of Psychiatry* 28: 469–477.

Mullen PE, Pathe M, Purcell R, Stuart GW (1999) Study of stalkers. *American Journal of Psychiatry* 156: 1244–1249.

Purcell R, Pathe M, Mullen PE (2001) The prevalence and nature of stalking in the Australian community. *Australian and New Zealand Journal of Psychiatry* 36: 114–120.

Rosenfeld B (2000) Assessment and treatment of obsessional harassment. *Aggression and Violent Behavior* 5: 529–545.

Rosenfeld B (2003) Recidivism in stalking and obsessional harassment. *Law and Human Behavior* 27: 251–265.

Spitzberg BH (2002) The tactical topography of stalking victimization and management. *Trauma, Violence, and Abuse* 3: 261–288.

Tjaden P, Thoennes N (1998) *Stalking in America: Findings from the National Violence Against Women Survey*. Washington, DC: US Department of Justice.

Sex Offenders

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Introduction

This article will review the classification, assessment, management, and treatment of persons who sexually offend. For the purposes of this article, the term "sex offenders" will refer to those individuals who commit sexual acts against other, nonconsenting persons. Usually, but not always, the offenders' behavior will be illegal. Sex offenders commonly have paraphilias, that is, recurrent, sexually deviant fantasies, urges, or behaviors. Paraphilias can range from being harmless eccentricities (e.g., fetishes) to public nuisances to psychologically or physically damaging, even deadly acts. Few human behaviors stir up the degree of public reaction as those of sex offenders, particularly child molesters, rapists, and sexual killers. However, as will be addressed in this article, sexual offenders are a more heterogeneous group than those offenders who make the headlines. Moreover, it is not uncommon for an individual offender to have more than one paraphilic diagnosis.

Etiology and Associated Features

The great majority of sex offenders are male (90–95%). Testosterone, the sex hormone with the greatest effect on male sexual behavior, clearly plays a significant role in the etiology of most sexual offenses. Histories of child sexual and physical abuse and family dysfunction are common. Social skills deficits are a frequent finding, as are low self-esteem, poor capacity for empathy, impaired impulse control, and obsessive deviant sexual fantasy. Sex offenders typically become aware of their deviant predilections around the time of puberty, and in some cases earlier. Fantasies of abnormal sexual behavior often predate their acting upon them by several years. It is important to consider the historical and cultural setting in which sexual offenses occur. What is abnormal can vary from culture to culture. For instance, in some cultures masturbation and homosexuality are still considered deviant.

Types of Sex Offender

Typology of sex offenders can be divided into three categories: (1) child molesters; (2) rapists; and (3) noncontact offenders (Table 1). Female sex offenders do not generally fall under these categories and will be discussed separately.

When sexual offenses are considered collectively, assaulters are often found to know their victims. These offenders may be neighbors, friends, acquaintances, or family members. Overall, approximately 75% of victims are known to some degree by offenders. The younger the victim, the more likely he/she is to know the perpetrator.

Child Molesters

Child molesters can be divided into fixated and regressed/situational types. This categorization in part refers to how ingrained the paraphilic attraction is to children. According to the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR), pedophilia is further subdivided into exclusive and nonexclusive types. The exclusive type is sexually attracted only to children, whereas the nonexclusive type is also attracted to adults. Moreover, for the DSM-IV-TR diagnosis of pedophilia, the person must be 16 years of age or older, and at least 5 years older than the child. Additionally, the person must have recurrent, intense, sexually arousing fantasies, sexual urges, or behaviors involving sexual activity with a child. In addition, these fantasies, sexual urges, or behaviors must cause clinically significant distress or interpersonal difficulty.

Fixated pedophiles view their attraction to children as permanent and note that this attraction usually begins in adolescence. The chronicity of the disorder is higher for those attracted to males and the recidivism rate is twice that of those attracted to females. Those attracted to females most commonly select children between 8 and 10 years of age, whereas those attracted to males usually prefer children aged 11–15 years old.

Sexual offenses by fixated pedophiles tend to be planned and well-thought-out as opposed to an impulsive action. Manipulation and grooming behavior are used in an attempt to lure children into sexual acts and gain the trust of their parents/guardians. They are outwardly giving and kind to the child, while meeting their own emotional needs through these children. The molester often justifies the offense by projecting his own thoughts and feelings on to the child, desiring the child to enjoy the experience. It is not unusual for this type of offender to profess "love" for the child. In this manner, the fixated pedophile is often convinced that the abusive behavior is not harmful. Further, the pedophile may use rationalization, stating that the abuse added educational value or sexual pleasure to the child's life.

Table 1 Types of sexual offender

Type	*Subtypes*	*Characteristics*
Child molesters	Fixated	Over 16 years of age, at least 5 years older than victim, grooming behavior, usually only attracted to children, rationalizes, professes ''love for the child,'' chronic in nature
	Regressed/situational	Attracted to adult women, offends as a result of stress and feelings of inadequacy
Rapists	Anger-motivated	General anger toward women, physical force meant to humiliate women, short interval between rapes, random victims
	Power-motivated	The reassurance type is motivated by doubt and insecurity and watches victims to plan attacks; the assertive type is motivated by dominance over women. Neither type seeks to use excessive force
	Sadism-motivated	Gains pleasure by inflicting pain and suffering on victim: most dangerous type of rapist
Noncontact offenders	Voyeur	Aroused by watching unsuspecting strangers naked or disrobing
	Exhibitionist	Aroused by exhibiting genitals to unsuspecting strangers

The regressed/situational child abuser is primarily attracted to adult females. When asked about their ideal sexual partner they will most frequently describe an adult female and often are involved in relations with an adult partner during the time of the sexual offense. This type of offender is more likely to offend as a result of stress or failures in life. The regressed/situational offender will report feelings of inadequacy and low self-esteem.

Unlike the fixated pedophile, the regressed child abuser is less likely to engage in grooming behavior toward the child and guardians. Rather, the offense is often unplanned and occurs in relation to a stressful life situation. Nevertheless, the abuse may begin before puberty and continue with the child past puberty. The victims of the regressed child abuser may be older than that of the fixated type.

Rapists

Rapists may be divided into those motivated by anger, power, and sadistic urges. The anger-motivated rapist is driven by a pathological retaliatory fantasy against the victim, and often uses excessive force as a mechanism to express general anger toward a particular gender (in most cases women, but in some cases men). The physical force utilized in the rape is meant to humiliate and degrade the victims. Victims are often random and follow no pattern or obvious characteristics of selection. The rape itself is often of a short interval and ends when the rapist has ventilated his anger.

The power-motivated typology can be subdivided into the power reassurance and power assertive types. The power reassurance type is motivated by doubt and insecurities of his own masculinity and sexual sufficiency. He will often strike by the cloak of night and attempt to use as little force as necessary to subdue the victim. Often this type will even offer apologies to the victim and endeavor to feign a desire to befriend the victim. In addition, potential victims are often watched in advance and attacks planned with selected victims.

The power assertive rapist utilizes the act of rape to assert his dominance over women. He typically does not doubt his masculinity and, in fact, may make a point to show his "masculine dominance" by repeatedly raping the victim during one attack episode. This offender, like the power reassurance type, does not seek to use more excessive force than is necessary to subdue the victim.

The sadistic subcategory of rapist is characterized by the offender's desire to gain pleasure by inflicting pain and suffering on his victim. The victim's response of fear and pain is sexually stimulating to the offender. Though the sadistic rapist is less prevalent than the other subtypes, he is the most dangerous of the offenders.

Gang rape is not considered a typology in itself. There are often different offender typologies within the individuals involved in the act. Therefore, the above categories should be individually applied to those individuals within the gang.

Noncontact Offenders

The noncontact offender category includes voyeurs and exhibitionists. A voyeur is defined by DSM-IV-TR as one who, over a period of six months or more, experiences recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving the act of observing an unsuspecting person who is naked, in the process of disrobing, or engaged in sexual activity. In addition, these fantasies, sexual urges, or behaviors must cause significant distress and/or impairment in functioning. Most often the victim is a stranger and no direct contact is sought. Masturbation at the scene or later to the memories of watching the unsuspecting

stranger is normally the source of sexual pleasure. The onset of voyeurism usually occurs before the age of 15 and may be chronic in nature.

An exhibitionist is defined by DSM-IV-TR as one who, over a period of six months or more, experiences recurrent, intense sexually arousing fantasies, sexual urges, or behaviors involving the exposure of one's genitals to an unsuspecting stranger. The fantasies, sexual urges, and behavior must cause significant distress and/or impairment in functioning. The victim of this offender is usually a stranger. Often the exhibitionist masturbates or fantasizes about masturbating in the presence of a stranger. The exhibitionist usually desires no intimate contact with the victim, but is aroused by the startle or shock effect the exposure of his genitals elicits. The condition usually begins before adulthood. As few arrests occur after the age of 40, it is hypothesized that the condition becomes less severe or abates.

Female Sex Offenders

The predominant typology of female sex offenders has been categorized into teacher/lover, predisposed type, and historical victim (Table 2). The teacher/lover is characterized by the offender who believes he or she has "fallen in love" and bears "no malice" toward the victim. In these cases the offender may attempt to justify the offense and involve the victim in the justification.

The predisposed type category of female sex offenders is characterized by difficulty with male relationships, intimacy-seeking, and a loner profile. Those offenders in this typology often see the younger child as fulfilling the emotional need for intimacy. They tend to be regressed in their social skills as well as emotional needs.

The third category of female sex offenders, the historical victim, is characterized by a history of sexual abuse as a child, feelings of powerless in relationships, and involvement in failed abusive male relationships. Offenders who fit this typology tend to displace blame for their own abuse on to the victim. In addition, their victims tend to be adolescent males rather than younger children.

Table 2 Types of female sexual offender

Type	*Characteristics*
Teacher/lover	Believes she has fallen in love with victim, feels no malice toward him or her, justifies offense
Predisposed	Difficulty with male relationships and seeking intimacy, a loner
Male-coerced	Often sexually abused as a child, has feelings of powerlessness, has had failed abusive relationships with males

Female sex offenders tend to differ from male sex offenders by perceiving sexual abuse as more deviant and also believing that sexually deviant behavior cannot be changed. Further, female sex offenders may be more resistant to investigation of their sexual offenses and often use more denial about their deviant activities than male sex offenders.

Assessment

The assessment of sexual offenders is unique in the field of mental health. Exploration of sexual functioning represents one of the most intimate areas of human experience, making questioning about this topic difficult in any situation. This inherent difficulty is exacerbated by the demand characteristics of the sex-offender interview. The external referral source (i.e., almost exclusively forensic and rarely self), lack of pathology-associated distress (i.e., ego syntonic symptoms and strong pleasure associated with deviancy), societal disdain for offenders and negative consequences associated with positive diagnosis (i.e., incarceration) all offer the evaluee strong incentives to deny any deviant sexual desires or behaviors. As such, traditional assessment techniques like the clinical interview are of less utility in evaluating sex offenders than other diagnostic groups (e.g., "Do you have difficulty sleeping?" as opposed to "Are you sexually attracted to children?"). Therefore, evaluators of sexual offenders have had to augment interview assessment with other measures in an attempt to provide an understanding of the nature and range of psychopathology of these individuals and to provide helpful treatment and disposition recommendations.

Further complicating the issue of assessment of sexual offenders is the pressure by the legal system, and unfortunately the willingness of some evaluators, to use the psychosexual assessment as a method of determining whether the evaluee perpetrated some aberrant sexual behavior. Research over the last several decades has generally shown that current psychosexual assessment measures lack the sensitivity and specificity to provide definitive information as to whether an individual is in fact a sexual offender.

The above-noted limitations in the assessment of sexual offenders does not mean, however, that the mental health field has little to offer in terms of providing valuable information in the diagnosis, treatment, and disposition planning of sex offenders. In fact, the assessment process can provide valuable insights into the nature and scope of the disorder, treatment-planning, and efficacy of interventions. In the paragraphs below are summarized the available literature on the assessment of sexual offenders and a model for comprehensive psychosexual evaluation.

The need to assess the sexual offender may take place at many different points, including preconviction (i.e., accusation, guilt phase of proceedings), postconviction (i.e., sentencing, treatment-planning, intervention), and end-of-sentence disposition planning for convicted sex offenders (e.g., release and parole). The structure of the interview assessment will vary considerably, depending on its point in the above timeline. For example, a preconviction assessment might involve a single forensic interview lasting several hours. A postconviction treatment assessment might involve a series of interviews over weeks or months. Research has shown that these two situations may result in very different assessment information. It is not uncommon for interviewees to provide more information in the latter situation as increased rapport is established with the interviewer. Such rapport is invaluable in the establishment of a therapeutic alliance necessary for the efficacy of the cognitive behavioral treatments.

Assessments may also be used for providing a clinical description of the offender or in determining risk of dangerousness and recidivism. This latter function has gained considerable attention following the US Supreme Court decision in *Kansas* v. *Hendricks*, establishing procedures for civilly committing sexual predators following completion of their prison terms. The literature on this subject is extensive and the validity of procedures is facing both scientific and legal challenges. A comprehensive review is beyond the scope of this article and the reader is referred to other sources for a more in-depth coverage of this area. However, a brief description of this process and common assessment techniques will be reviewed.

Assessment Process

Interview The first step of the evaluation of the sexual offender should be the clinical interview. Here, in addition to addressing traditional areas of history and psychological functioning, the examiner should conduct a thorough psychosexual history, including such areas as early sexual experiences, sexual victimization, types and numbers of sexual partners, range of sexual behaviors, masturbatory practices, use of pornography, negative consequences of sexual behavior, and sexual dysfunction. This self-report, when compared to other data obtained below, will provide the examiner with useful information regarding the evaluee's level of denial, insight, and amenability to treatment.

Collateral data Because of the factors identified above, sexual offenders show a strong propensity to deny, minimize, and rationalize their sexual deviancy. Therefore, other sources of information must be obtained to augment their self-report. In conducting a psychosexual assessment it is important that the examiner have access to victim and witness statements, interviews of significant others, past arrest records, previous mental health records, and any other information that might shed light on the present referral question.

Psychological inventories Psychometric testing is often useful in the evaluation of the sex offender. Traditional assessment instruments utilize paper-and-pencil self-report inventories to provide information on the offenders' psychosexual and psychological functioning. In general, these tests fall into two categories: general psychological inventories adapted to the sex-offender population (e.g., Minnesota Multiphasic Personality Inventory or MMPI) and specific psychosexual inventories (e.g., Multiphasic Sex Inventory). Table 3 provides a listing of this category of assessment measures.

Traditional measures of psychopathology such as the MMPI have been used extensively with sex-offender populations. These tests have identified several common profiles among sexual offenders. Although these classification systems often lack specificity, they can provide valuable information on general psychological functioning, including the areas of

Table 3 Sex offender assessment instruments

Test type	
Self-report: nonsex-offense-specific	Minnesota Multiphasic Personality Inventory
	Millon Clinical Multiaxial Inventory
	Psychological Inventory of Criminal Thinking Styles
Self-report: sex offender-specific	Multiphasic Sex Inventory
	Colorado Sex Offender Risk Scale
	Clark Sex History Questionnaire
	Multidimensional Assessment of Sex and Aggression
	Abel Screen for Sexual Interest
Actuarial assessment instruments	Rapid Risk Assessment of Sexual Offense Recidivism
	Static-99
	Violence Risk Appraisal Guide
	Sex Offender Risk Appraisal Guide
	Structured Anchored Clinical Judgment
	Sexual Violence Risk-20
	California Actuarial Risk Assessment Tables
	Minnesota Sex Offender Screening Tool – Revised

impulsivity, judgment, level of denial, and associated psychopathology.

There are also a number of sex-offense-specific self-report inventories (Table 3). These tests offer the advantage of an in-depth assessment of sexual interests and deviancy. Many are psychometrically sound, have internal validity measures, and produce scales that reflect sexual deviant classifications (e.g., pedophilia). However, many of these tests are also rationally derived and thus comprise items that are face-valid. As such, these items are subject to deliberate distortion by individuals seeking to deny or minimize their problems.

Physiological assessment In an attempt to correct for the possible distortions associated with self-report inventories, many evaluators have also utilized physiological measures in assessing sex offenders. These methods seek to provide a more objective assessment of sexual deviant interest and behaviors. The two primary physiologic methods used in the assessment of sex offenders are phallometry and polygraphy.

In phallometric assessment, the individual's penis is connected to an instrument that measures erectile changes to various stimuli (e.g., the person is shown a picture of prepubescent children). This method of assessment can detect patterns of deviant sexual arousal that an individual might verbally deny. Research on phallometric testing indicates good sensitivity and utility, especially in the area of pedophilic interest. However, phallometric testing is less effective in evaluating other types of sexual offender, and can lead to a high rate of false positives (e.g., nonsexual-offending men being aroused by forced-sex scenarios). There is also a risk of false-negative findings in individuals who are able consciously to suppress arousal to deviant stimuli that are in fact stimulating.

Another physiologic measure used in the assessment of sexual offenders is that of polygraphy. In this method, the individual is asked a series of questions regarding his sexual interests and behaviors while undergoing polygraph monitoring. The premise is that deceptive answers will result in physiological changes that are detected by the machine and interpreted by the polygraph examiner.

In summary, physiologic measures, because of issues of measurement error and conscious suppression, have not proven to be the gold standard in the assessment of sexual offenders as had once been touted. However, while certainly not infallible, these methods can be valuable additions to the clinical interview and traditional psychometric testing involved in the assessment of sexual offenders. When used as part of a multimodal assessment and treatment approach, physiologic measures are useful tools in confronting denial, assessing treatment gains, and monitoring recidivism.

Actuarial assessment More recently, a number of structured and semistructured interviews have been developed that assess sexual offense recidivism risks using actuarial data. These instruments have been used extensively in end-of-sentence evaluations of convicted sex offenders as a measure of risk for reoffense and basis for civil commitment. These instruments compare the demographic, offense, and personality characteristics of the offender with established base rate predictors associated with reoffense. Although not widely used in initial assessments, these measures have shown some utility in predicting reoffense. Table 3 provides a listing of the most frequently used risk assessment measures.

Summary The assessment of sexual offenders is a difficult process where inaccurate classification (both false positives and false negatives) has serious consequences. It is important that the evaluator keep abreast of the research literature, obtain as much information as possible for each case, use a multimodal assessment strategy, and know the limitations of any assessment techniques used. Issues of denial and questionable motivation to change can complicate this process, but if the above caveats are employed, the professional can provide the referral source with competent, informative, and valid psychological assessments of the sexual offender.

Management of Sexual Offenders

As noted earlier, sexual offenders are a heterogeneous group with varying etiologies, behaviors, clinical courses, and prognoses. Consequently, no single management or treatment approach is suitable for all sexual offenders, nor is there a "cure" *per se*. While treatment can help decrease the chances of reoffending behaviors, it cannot make the desire disappear. Therefore, management and treatment are generally a long-term undertaking – even lifelong in some cases.

Sex offenders benefit most from a carefully designed, multimodal treatment plan resulting from a thorough assessment. Only a small minority of sex offenders will voluntarily seek treatment. Rather, they generally enter treatment after their acts have brought them into contact with law enforcement. It is believed that the earlier management and treatment can be initiated – ideally before adulthood – the better the prognosis for the offender not to enter an ingrained, self-reinforcing pattern of sexual offending.

Persons with more serious paraphilias have a greater likelihood of receiving management and treatment (and incarceration) for their acts than others, particularly those who offend against other members of society. For example, individuals with zoophilia (bestiality, or attraction to animals) or frotteurism (sexual gratification involving touching or rubbing against a nonconsenting person) are going to be in a position to receive sexual offender treatment far less often than the rapist or child molester. And while some sex offenders may not commit technically illegal acts (this can vary from one jurisdiction to the next), their behaviors may still negatively impact their interpersonal and societal adjustment and therefore indicate the need for treatment.

Additionally, there are sexual offenders – such as serial rapists with psychopathic personalities or lust murderers – who are not appropriate candidates for conventional sex-offender treatment. Instead, the management of such an offender is going to be prolonged incarceration to protect society. Perhaps some day treatments will be available for the most egregious of sexual offenders.

Management and Treatment Approaches for Sexual Offenders

The more common methods for the management and treatment of sexual offenders are listed in Table 4. Group therapy is a mainstay of sex-offender treatment in many programs. A cognitive behavioral approach with relapse prevention has been shown to be the most useful of psychotherapeutic approaches.

Table 4 Management and treatment methods for sexual offenders

- Psychotherapy
  - Cognitive behavioral
  - Insight-oriented (limited application)
  - Supportive
  - Other
- Group therapy
- Psychoeducational curricula
- Family therapy
- Marital therapy
- Social skills training
- Relapse-prevention techniques
- Sexual arousal conditioning
- Victim empathy training
- Promotion of community/social support networks
- Support of participation in work/school
- Treatment of accompanying psychiatric disorders
- Substance abuse treatment
- Residential treatment
- Psychopharmacological medications (e.g., selective serotonin reuptake inhibitors)
- Antiandrogen medications
  - Medroxyprogesterone acetate
  - Leuprolide acetate
  - Cyproterone acetate
- Surgical castration
- Community supervision
- Probation
- Imprisonment
- Civil commitment (e.g., sexually violent predator laws)

Cognitive behavioral treatment In this therapeutic approach, developing cognitive mediation strategies in the three key modalities of thinking, feeling, and behavior are utilized as techniques in offense reduction as well as in motivation to engage in treatment. Further, personally relevant relapse prevention plans must be put in place in order to prevent relapse when returning to the community. Though cognitive behavioral therapy may differ in its emphasis, the primary focus is usually on changing the structure of the thought process moderating deviant sexual behavior and interests, improving social skills, and developing new strategies for alleviating attitudes and cognitive distortions regarding the offensive behavior.

Cognitive behavioral approaches seek either to reduce deviant sexual arousal or increase appropriate sexual arousal. One such technique to address these areas is covert sensitization, a process in which the offender identifies the events or behaviors that led to the sexual offending. These events or behaviors are then paired with highly negative images such as being arrested and going to prison.

The modification of cognitive distortions or cognitive restructuring is an important component of social skills training. Cognitive distortions include such beliefs or attitudes as women who dress in a certain manner deserve sexual abuse or that fondling does not cause psychological damage to a child.

Though cognitive behavioral therapy is generally considered to be a primary treatment factor in reducing recidivism, some studies indicate that offender characteristics rather than treatment type influence recidivism outcome or what is commonly known as effect size.

Biological treatments The advent of pharmacotherapies like the selective serotonin receptor inhibitors (SSRIs) and antiandrogens has increased the role of biological treatments for sex offenders. Evidence exists to indicate that SSRIs can help control the obsessive thinking patterns and compulsive behaviors of sexual offenders. Relatedly, antiandrogens can be a helpful treatment component by decreasing the sexual drive (through suppression of male sex hormones) and therefore paraphilic fantasies, urges, and behaviors.

Implementation of management plans It is beyond the scope of this article to provide an in-depth review of the various treatment methods for sexual offenders. Some general comments will be made on the implementation of management plans. At the onset of treatment, the offender's level of denial should be determined. Some degree of denial is to be expected. Acceptance of at least some responsibility for their sexual offenses is an important ingredient in treatment. Significant denial will dramatically interfere with the work of treatment, as in the need for the offender to examine and develop an understanding of the thoughts, feelings, behaviors, and antecedent events involved in the sequence leading to his deviant acts.

Similarly, motivation must be present. Typically, offenders with internal motivation have better prognoses than those who lack it. For a significant number of offenders, external motivation will be necessary, e.g., the threat of revocation of probation and incarceration for not complying with treatment. For those offenders with low motivation, some success has been reported in overcoming this obstacle through the use of motivational interviewing within the context of a cognitive behavioral therapy.

Taken together, factors like level of denial, motivation, remorse, intelligence, personality structure, and family/community support can be considered in determining whether an offender should be in outpatient treatment versus more structured settings versus not being accepted into treatment at all. Those who steadfastly maintain their innocence and show no remorse will not benefit from treatment.

Relatedly, it is important for those administering treatment to sexual offenders to stay in communication with other persons who may be involved in the case, such as parole officers, social service workers, affected family members, and other treating professionals. Feedback from other sources is important in monitoring the offender's commitment to the program, treatment effectiveness, and risk of recidivism.

Typically an approach using a combination of interventions will have the best chance of success (e.g., combined psychotherapeutic, community, and biological treatments). However, treatment interventions must be chosen carefully, and therapeutic options cannot be arbitrarily applied to all sex offenders. For example, social skills training could backfire with certain offenders who might later use these skills to be more effective in procuring victims. Similarly, victim empathy training may actually be sexually stimulating – and thus contraindicated – for the sadist who enjoys learning more about victims' pain and suffering. In assembling participants for group therapy, an excess of markedly antisocial members may impede the attainment of therapeutic goals. Furthermore, while chemical castration through the use of antiandrogen medications may help lessen deviant sexual desires, it is no guarantee against reoffending.

Treatment and Recidivism

Recidivism refers to the proportion of offenders who commit one or more additional offenses. Many persons who commit a first sexual offense will progress to a pattern of repetitive sexual offending. Certain subgroups, such as sadistic rapists and child molesters, particularly those who target boys (homosexual pedophiles), are believed to be at particularly high risk for reoffending. Violent rapists are more likely to reoffend than nonviolent rapists. For child molesters, intrafamilial abusers have a better prognosis than those who victimize nonbiological children. Some pedophiles have admitted to abusing hundreds of victims in their lifetime. Additionally, sex offenders' reoffending may escalate in terms of offense seriousness over time. Thus, recidivism rates are crucial information for the evaluation of sex-offender treatments.

Unfortunately, it is difficult to determine recidivism rates with confidence. The risk of recidivism increases with time. Rearrest rates are unreliable and should not be considered an accurate measurement of recidivism. Most offenders don't get caught for a given sex crime, thus rearrest rates are an underestimate. The accuracy of self-report measures must also be viewed with caution. Sex offenders are usually acutely aware of the legal consequences of their acts, and admitting to having committed a sexual crime in writing, even after being assured anonymity, is often not enough to quell fears of arrest/rearrest fears. Adding to this concern is the special risk certain types of sex offenders have of being assaulted by other inmates when in prison. Lastly, sex offenders not uncommonly have at least some degree of antisocial personality traits that have contributed to their committing sexual offenses in the first place. Dishonesty and lying are core features of persons with antisocial personality disorders, and these qualities decrease the chances of getting a valid report of sexual offenses by questionnaire.

In summary, recidivism rates are dependent on length of follow-up and vary widely in studies, ranging from 10% to 75%. A rough estimate of recidivism at 5 years following treatment would be in the range of 15–25% for sex offenders as a whole.

See Also

Children: Sexual Abuse, Overview; Sexual Abuse, Epidemiology; **Sexual Offenses, Adult:** Human Normal Sexual Response; Injuries and Findings after Sexual Contact; Management Postassault; Male Sexual Assault; Drug-Facilitated Sexual Assault; Global Crime Figures and Statistics

Further Reading

Allen CM (1991) Women as perpetrators of child sexual abuse: Recognition barriers. In: Horton AL, Johnson BL, Roundy LM, Williams D (eds.) *The Incest Perpetrator: A Family Member No One Wants to Treat,* pp. 108–125. Newburg Park, CA: Sage.

American Psychiatric Association (1999) *Dangerous Sex Offenders. A Task Force Report of The American Psychiatric Association.* Washington, DC: APA.

American Psychiatric Association (2000) *Diagnostic and Statistical Manual of Mental Disorders,* 4th edn., text revision *(DSM-IV-TR).* Washington, DC: American Psychiatric Press.

Blanchard R, Klassen P, Dickey R, Kuban M, Blak T (2001) Sensitivity and specificity of the phallometric test for pedophilia in non-admitting sex offenders. *Psychological Assessment* 13: 118–126.

Conroy M (2002) Assessment of sexual offenders. In: Vandorster B (ed.) *Forensic Psychology: From Classroom to Courtroom,* pp. 219–246. New York: Kluwer Academic/Plenum.

Craig LA, Browne KD, Stringer I (2003) Risk scales and factors predictive of sexual offense recidivism. *Trauma, Violence and Abuse* 4: 45–69.

Groth AG (1979) *Men Who Rape: The Psychology of the Offender.* New York: Plenum.

Hanson RK, Bussiere MT (1998) Predicting relapse: a meta-analysis of sexual offender recidivism studies. *Journal of Consulting and Clinical Psychology* 66: 348–362.

Hanson RK, Gordon A, Harris AJR, *et al.* (2002) First report of the collaborative outcome data project on the effectiveness of psychological treatment for sex offenders. *Sexual Abuse: A Journal or Research and Treatment* 14: 167–192.

Hazelwood RR, Burgess AW (2001) *Practical Aspects of Rape Investigation: A Multidisciplinary Approach,* 3rd edn. Boca Raton, FL: CRC Press.

Konecek P, Jones C (1996) *Five-Year Recidivism Follow-up of Sex Offender Releases.* Ohio Department of Rehabilitation and Correction Grant, Ohio: Office of Management Information Systems.

Krafft-Ebing R (1882) *Psychopathia Sexualis* (Klaf FS; 1965 translation). New York: Stein and Day.

Marshall WL, McGuire J (2003) Effect sizes in the treatment of sexual offenders. *International Journal of Offender Therapy and Comparative Criminology* 47: 653–663.

Marshall WL, Anderson D, Fernandez Y (1999) *Cognitive Behavioural Treatment of Sexual Offenders.* Hoboken, NJ: John Wiley.

Prentky RA, Burgess AW (2000) *Forensic Management of Sexual Offenders.* New York: Kluwer Academic/Plenum.

Salter AC *A New Look at the Female Offender.* Available online at: www.annasalter.com/hardouts/d1110_FemaleSexOffenders.pdf.

Schlank M (1995) The utility of the MMPI and the MSI for identifying a sex offender typology. *Sexual Abuse: Journal of Research and Treatment* 7: 185–194.

Schlesinger LB (ed.) (2000) *Serial Offenders: Current Thought, Recent Findings.* Boca Raton, FL: CRC Press.

Shaw JA (ed.) (1999) *Sexual Aggression.* Washington, DC: American Psychiatric Press.

Vick J, McRoy R, Matthews BM (2002) Young female sex offenders: assessment and treatment issues. *Journal of Child Sexual Abuse* 11: 1–23.

Wilcox DT (2000) Application of the clinical polygraph examination to the assessment, treatment and monitoring of sex offenders. *Journal of Sexual Aggression* 5: 134–152.

Witt PH, Bosley JT, Hiscox SP (2002) Evaluation of juvenile sex offenders. *Journal of Psychiatry and Law* 30: 569–592.

Criminal Responsibility

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Introduction

In western jurisprudence, a crime is held to consist of two components: the *actus reus*, a forbidden act, and the *mens rea*, a guilty state of mind. In order to find a person guilty of a crime, it is not sufficient to prove that he/she committed the alleged act; it must also be proven that he/she had the intent to commit the act. If either of these elements is missing, then criminal responsibility is diminished or absent.

In certain cases, such as those involving young children or those suffering from major mental illness, the accused person may have committed the act but lacked the ability to form the intent to commit the act. In other words, he/she may have lacked the ability to make a rational, conscious decision to do wrong. In these circumstances the accused person may be found not criminally responsible for the act. This defense, when applied to those suffering from mental illness, is called the insanity defense.

However, there are other circumstances in which criminal responsibility may be diminished or absent. In some cases, the accused person may have

committed the act in question but had no specific intent to commit the act. In these cases he/she may be found to have diminished criminal responsibility for the act. In others cases, the accused person may have committed the act without being consciously aware that he/she was committing the act. In these cases the act is involuntary, and there is no intent to commit the act. In these cases the accused person may qualify for a finding of automatism, which can lead to either a finding of absent criminal responsibility or an outright acquittal.

The concept of absent or diminished criminal responsibility remains a part of the criminal law in most western jurisdictions. Its purpose is to make allowances for abnormal mental states and to avoid punishing those who did not choose to do wrong. In modern times there has been an emphasis on treatment rather than punishment for those found not criminally responsible for their actions. There has also been an emphasis on protecting the public from dangerous mentally disordered persons, which requires an assessment of the level of risk that insanity acquittees pose to the community.

The History of the Insanity Defense

The concept of the insanity defense goes back several thousand years. Aristotle wrote: "A person is morally responsible if, with knowledge of the circumstances, and in the absence of external compulsion, he deliberately chooses to commit a specific act." Ancient Hebrew law made a distinction between offenses where blame could be attributed to the offender, and offenses where blame could not be attributed to the offender. Included in this latter category were criminal acts committed by children or by the mentally ill. In the thirteenth century CE (common era) the idea of moral wrongfulness was codified into English law. Thereafter, a crime was held to consist of the two elements of *actus reus* and *mens rea*.

While the concept itself is ancient, there has been much debate throughout recent history about how to determine which persons should qualify for the insanity defense. Several standards were proposed at various times. The 1724 trial of Edward Arnold for the wounding of Lord Onslow produced what is known as the "wild beast test." Justice Tracy held that for a man to be acquitted by reason of insanity he must be "totally deprived of his understanding and memory and doth not know what he is doing, no more than an infant, than a brute, or a wild beast." This test was cognitive in nature. In order for an accused man to qualify for the insanity defense, his cognitive abilities had to be significantly impaired, rendering him little better off than an animal.

In 1800 the criteria for the insanity defense were expanded. In the trial of James Hadfield for attempted regicide, his attorney argued that insanity should include states in which "the mind is under the influence of delusions, where the reasoning proceeds upon something which has no truth ... but vainly built upon some morbid image formed in a distempered imagination." Mr. Hadfield had attempted to assassinate the King as a result of a delusional belief, and was eventually acquitted on the grounds of insanity. This expanded the number of persons who could qualify for the insanity defense. No longer was it necessary to be significantly cognitively impaired. Instead, a person could qualify for the defense if his/her criminal act was the direct product of mental illness, even if he/she was otherwise cognitively intact.

Yet another test for the insanity defense was suggested in the 1840 trial of Edward Oxford, who attempted to assassinate Queen Victoria. The judge in that case stated that: "If some controlling disease was, in truth, the acting power within him, which he could not resist, then he will not be responsible." This test was volitional in nature. It did not examine the accused person's cognitive abilities as the previously discussed tests did, but instead focused on the person's ability to control his/her behavior. An individual qualified for the insanity defense if, because of a mental illness, he/she was unable to resist the impulse to commit the criminal act.

The modern cognitive test for the insanity defense came into being after the 1843 trial of Daniel M'Naghten. Mr. M'Naghten fatally shot Edward Drummond, secretary to the English Prime Minister, and was acquitted on the grounds of insanity. This led to a public outcry, and Queen Victoria summoned the law lords in the House of Lords and asked them to answer various questions about the insanity defense. The so-called M'Naghten rules were derived from their answers. They stated in part that "Every man is to be presumed to be sane ... to establish a defense on the ground of insanity, it must be clearly proved that at the time of the committing of the act, the party accused was labouring under such defect of reason, from disease of the mind, as not to know the nature and quality of the act he was doing, or if he did know it, that he did not know he was doing what was wrong."

The Insanity Defense Today

The criteria for the insanity defense are jurisdiction-specific. However, most western jurisdictions have adopted some version of a cognitive test based on the M'Naghten rules. Some jurisdictions have added a volitional component to the cognitive test. An example of this is the American Law Institute (ALI) test,

modified versions of which were adopted by several states in the USA. The ALI test reads: "A person is not responsible for criminal conduct if at the time of such conduct as a result of mental disease or mental defect he lacks substantial capacity either to appreciate the criminality of his conduct or to conform his conduct to the requirements of the law."

All tests of the insanity defense require that the accused person suffer from a mental disorder. Mental disorder, as used in the insanity defense, is a legal term with a legal definition that varies with jurisdiction. The types of mental disorders that are accepted as meeting the criteria for the insanity defense vary with jurisdiction. Psychotic illnesses, which involve a loss of contact with reality, are accepted by almost all jurisdictions. Other mental disorders may also be accepted, but in most cases the defense is limited to those disorders that are officially recognized by the medical community. Some jurisdictions have specifically excluded certain disorders from qualifying for this defense. Disorders that are sometimes specifically excluded include personality disorders, paraphilias, or sexual perversions, impulse-control disorders such as pyromania and kleptomania, and voluntary intoxication.

The other terms used in the insanity defense, and their interpretations, also vary with jurisdiction. However, in general, the cognitive test for the insanity defense requires that the accused person be unable to understand the nature of his/her criminal act and its potential ramifications and consequences. An example of this is a man who kills another because he believes that the victim is a demon. In such a case, the perpetrator does not understand that he is killing another human being. Even if the perpetrator does understand the nature of his act and its consequences, he may also qualify for the defense if he did not know that his act was wrong. "Wrong" in this context may refer to legal or moral wrongfulness, and this will vary across jurisdictions. An example of lack of knowledge of moral wrongfulness is a man who kills another because he believes that the victim was trying to kill him. In this case, the perpetrator understands that he is killing another human being, but believes that his actions are justified to save his own life.

The volitional component of the insanity defense is not as frequently used as the cognitive test. This test is also known as the "irresistible-impulse test." To satisfy this test, the accused person must have felt compelled to perform a criminal act, and have been unable to resist the urge to commit the act. In practice, this test is problematic because of the difficulty in distinguishing the irresistible impulse from the impulse that was not resisted.

Despite sometimes widespread publicity surrounding the insanity defense, only a very small percentage of felony prosecutions result in a successful insanity defense. In the USA, this number is close to 1%. In the majority of cases both sides agree with respect to psychiatric diagnosis and legal opinion, and there is little contention. The much-discussed "battle of the experts" is in fact an uncommon occurrence, but its frequency is often overestimated because of the media attention that such cases attract.

Disposition of Those Found Not Guilty by Reason of Insanity

Prior to 1800, in England and Wales, those found not guilty by reason of insanity were released into the community. The detention of insanity acquittees resulted from the 1800 Hadfield trial. When Mr. Hadfield was acquitted of attempted regicide, there was concern that he could be dangerous if released into the community. The judge in that case stated: "The prisoner, for his own sake, and for the sake of society at large, must not be discharged. It is absolutely necessary for the safety of society that he should be properly disposed of." As a result, the Criminal Lunatics Act of 1800 was passed, which led to immediate postacquittal detention of those found not guilty by reason of insanity.

Today, the disposition of persons found not guilty by reason of insanity varies with jurisdiction. In most western jurisdictions they are assessed to determine their level of dangerousness. If they do not pose a danger to the public, they may be released into the community. If they are deemed to be a danger to the public, they can be detained. The circumstances of detention, including whether it is in a prison facility or mental hospital, depends on the jurisdiction. The focus is on providing treatment for the insanity acquittee, and on protecting the public. Several jurisdictions have laws that allow for the indeterminate detention of those found not guilty by reason of insanity for as long as they are deemed a danger to the public. In several jurisdictions, multidisciplinary review boards make these decisions about disposition. These boards often include representatives of the legal and psychiatric communities, as well as members of the public.

It is often assumed by members of the public that insanity acquittees are quickly released back into the community. However, studies in the USA and in Canada show that the majority of insanity acquittees are detained for longer periods than offenders convicted of similar crimes.

Diminished Responsibility

An accused person who does not qualify for the insanity defense may still claim diminished responsibility for his/her criminal act. Diminished responsibility occurs when a disturbance in mental state negates the intent necessary for a particular offense. In such a case, the accused person may be convicted of a lesser offense.

This defense is based on the fact that the law in many western jurisdictions divides criminal offenses into two groups: (1) general-intent crimes; and (2) specific-intent crimes. General-intent crimes require a lower degree of intent than specific-intent crimes. For example, murder, a specific-intent crime, is generally held to require more intent than manslaughter, a general-intent crime. An accused man charged with murder may claim that a disturbance in his mental state, such as intoxication, prevented him from forming the intent to kill his victim. If he is successful, he may be convicted of manslaughter instead of murder, and face lesser sanctions as a result.

Automatism

Automatism negates criminal responsibility. The term is used to describe behavior that occurs when a person is unconscious and unaware that the act is taking place. In these cases, the act is not voluntary and there is no intent to commit the act. An example of this is a man who murders his spouse while sleepwalking.

Automatism is often classified into two groups: (1) insane; and (2) noninsane. Insane automatism occurs when the condition giving rise to the automatism is intrinsic to the mind of the accused person. An example of this is automatism due to epilepsy. If this defense is successfully used, the accused person is found not guilty by reason of insanity, and is subject to the same potential detention as anyone found not guilty by reason of insanity. In noninsane automatism, the automatism is due to some factor external to the mind of the accused person. In other words, the accused person has a normal mind that was temporarily affected by some external factor. An example of this is automatism due to severe hypoglycemia. If this defense is successfully used, the accused person receives an absolute acquittal and is no longer under the control of the criminal justice or mental health systems.

Psychiatric Evaluation for Criminal Responsibility

Decisions concerning criminal responsibility are legal decisions to be made by the court. The role of mental health experts, such as psychiatrists and psychologists, is to provide information to the court about the accused person's psychiatric diagnosis and mental state at the time of the offense. This assists the court in rendering its decision.

When conducting a psychiatric evaluation concerning criminal responsibility, the goal is to obtain information to assist the court in determining whether the person satisfies its jurisdiction's requirements for the insanity defense, diminished responsibility, or automatism. It will be necessary to diagnose any psychiatric condition that is present at the time of the assessment or at the time of the offense. It will also be necessary to explore the person's mental state at the time of the offense, and to determine what effect, if any, his/her mental state had on the commission of the offense.

In order to conduct a comprehensive evaluation, it is necessary to interview the accused person, as well as to obtain information from a variety of collateral sources such as hospital and police reports. It may also be necessary to interview others who can provide information about the accused person. Psychological testing may also play a valuable role.

Because these evaluations are done for legal purposes, certain ethical considerations apply. It is necessary to inform the accused person of the purpose of the assessment, including whether the assessment is being done at the request of his/her attorney, the state's attorney, or the court itself. It must also be made clear that the evaluator is acting as an impartial assessor and not as the accused person's personal physician or advocate. Both the accused person and any collateral information sources must be informed that what is said during the interview is not confidential, and may be incorporated into a report that may be sent to the court. Proper procedure must be followed in obtaining records, especially confidential health records.

There are several potential difficulties in evaluating accused persons for criminal responsibility. Because they have been charged with a criminal offense, and face potential legal sanctions, there is an incentive to attempt to fake mental illness where it does not exist. Even when the mental illness is genuine, there is the temptation to exaggerate the role that the illness played in the commission of the criminal act. There is also the possibility that some mentally ill accused persons will go to the opposite extreme and attempt to deny their mental illness, or minimize its seriousness, often out of a sense of shame. It is therefore incumbent upon the evaluator to assess the credibility of any information provided by the accused person. Because much of the information involved is inherently subjective, this is a difficult

task. The evaluator may be helped in this task by collateral information from health records, and interviews with persons who are familiar with the accused.

The evaluation of criminal responsibility requires a retrospective exploration of the accused person's mental state at the time of the offense. The offense may have occurred anywhere from a few hours to several years in the past. This introduces difficulties since the memory of both the accused person and of collateral information sources may have faded in the intervening time. The evaluator may be assisted in this task by health or police records which document the accused person's mental state near the time of the offense.

The evaluator is expected to address his/her clinical opinion to the legal issues involved in the case. However, it may be difficult to adapt the clinical facts of the case to the legal definitions in use. For example, it may be difficult for an evaluator to offer an opinion as to whether or not an accused person knew that his/her act was wrong. The legal definition is a yes–no proposition – either the accused person knew the act was wrong, or he/she did not know that it was wrong. However, the clinical situation may be more ambiguous. The accused person may have felt that his/her act was justified without being completely sure that it was. He/she may have had some doubts about its wrongfulness. He/she may even not have thought about the issue of wrongfulness at all at the time.

Conclusion

The concept of reduced criminal responsibility is an ancient one. It is still present in western jurisdictions because it serves a valuable purpose. It prevents the punishment of those who could not choose to do wrong, and diminishes the punishment of those who were mentally disturbed at the time of the offense. At the same time, it provides for the detention and possible treatment of those who pose a danger to the public as a result of mental disorder, and as such plays a role in safeguarding public safety. While decisions about criminal responsibility are legal ones, mental health experts such as psychiatrists and psychologists play a valuable role in assisting the courts in formulating their decisions.

See Also

Forensic Psychiatry and Forensic Psychology: Mental Handicap and Learning Disability; Malingering; Personality Disorder

Fitness (Competence) To Stand Trial

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Introduction

This article refers to an accused person's mental capacity to participate meaningfully in criminal proceedings against him or her. Few European countries have any specific provisions for this notion but regard mentally disordered offenders as lacking criminal responsibility and therefore not deserving of punishment. Alternatively, all countries with an Anglo-American legal tradition (the UK, Australia, Canada, and the USA), to varying degrees, require an individual to be mentally capable of participating in the proceedings before a trial can proceed.

The terminology varies from one jurisdiction to another. In the UK the term "fitness to plead" is used, as it is in Australia. In Canada the term "fitness to stand trial" is used and in the USA "competence" is usually applied.

The Law on Fitness in the UK

As a basic principle, fitness to plead was recognized in English law from the Middle Ages, but it has evolved over the centuries. By the eighteenth century a mentally disordered defendant was returned to custody and tried subsequently only after recovery. English law continued to apply this principle and it was incorporated into American practice at the end of the nineteenth century.

The criteria used to determine fitness to plead evolved through nineteenth-century English case law which involved many cases of deaf mutes, who were unable to communicate. The criteria were primarily concerned with intellectual capacity and were summarized in the case of *R*.v. *Pritchard* (1836), which remains the basis on which fitness to plead is determined in the UK. Pritchard stated that a person must meet the following criteria if he/she is to be considered fit to plead and able "to make a proper defence":

1. be able to understand the charge
2. be able to enter a plea
3. be able to challenge a juror
4. be able to follow court proceedings and understand the evidence
5. be able to instruct counsel.

In the UK the issue of fitness to plead can be raised by the defense, prosecution, or the trial judge.

Although it is possible for courts to postpone consideration of the defendant's fitness to plead until any time after the prosecution has presented its case, in order to ensure that there is a case to be answered, the issue is usually raised and determined at the pretrial stage. A jury is assembled to hear the evidence and determine the accused's fitness to plead. Such a hearing would normally include the oral evidence of a psychiatrist. If the issue of fitness is raised by the defense, the burden of proof rests with them and they must prove their case on a balance of probabilities (*R.* v. *Podola* 1959). If the question is raised by the prosecution and disputed by the defense, the Crown must prove its case beyond reasonable doubt (*R.* v. *Robertson* 1968). Similarly, if the issue is raised by the judge and disputed by the defense, it must be proven by the prosecution.

The Criminal Procedure (Insanity) Act 1964 reviewed the concept of fitness to plead but did not comment on the criteria for determining fitness, which remain those outlined in Pritchard, and concentrated primarily on disposal of defendants found unfit. In cases where the defendant was found to be "under disability in bar of trial," the court was required to make an order that the accused be detained in hospital (rather than in custody). This could be a maximum- or medium-security hospital or a local hospital, depending on the gravity of the alleged offense and the apparent risk to the public. The accused was treated as though subject to a restriction order without limit of time for the first 2 years of detention: this had the effect that the person could not be granted leave or discharged without the permission of the Home Secretary. Each person's case was reviewed at 6-month intervals for the first 2 years of his/her detention in hospital to consider his/her fitness. If, at the end of 2 years, the Home Secretary was advised that the person remained unfit then the Home Secretary would review the continuing need for a restriction order and terminate it if satisfied that it was unnecessary for the protection of the public. The person would remain compulsorily detained in hospital until the treatment team concluded that he/she was sufficiently improved for discharge. In practice this meant that most of those found unfit to plead spent lengthy periods detained in hospital, with approximately one-quarter remaining in hospital indefinitely. As a result of these significant consequences, the issue of fitness to plead tended to be raised only in cases involving serious charges.

Before 1982 it was the policy of the Home Office only in exceptional circumstances to remit for trial those patients who regained their capacity to plead. The most common reasons given for failing to remit a person who had become fit were the length of time that had passed since the original offense and the minor nature of the offense. However, if the person insisted on his/her right to trial, Home Office policy was to remit if possible. Policies changed after 1982 and failure to remit had to be justified and there was a marked concomitant rise in the number of people returned to trial.

A study of all 295 defendants who were found unfit to plead between 1976 and 1988 found that a third were detained in maximum-security hospitals and the remainder were detained in medium-security units or local hospitals. Of this population, 135 (46%) eventually regained their capacity to plead, of whom 76 (26%) returned for trial.

The Report of the Committee on Mentally Abnormal Offenders ("The Butler Report," 1975) criticized the way that the 1964 Act dealt with defendants who were found to be "under disability in relation to trial" (its preferred term). The Committee recommended that all such defendants should have an additional trial of the facts, intending to protect those who were not guilty, and also recommended that the courts should have wider powers of disposal.

However, it was not until the Criminal Procedure (Insanity and Unfitness to Plead) Act 1991 that these amendments were made. The 1991 Act requires that, once a jury has found a defendant to be unfit to plead, this jury should be dismissed and a new jury be sworn in to hear a trial of the facts. This second trial determines whether, based on the evidence, it is likely that the person committed the alleged offense. In the case of insubstantial evidence, the charges should be withdrawn and the defendant discharged. If the person is found to have committed the alleged offense then the 1991 Act gives courts a wider range of disposals than the 1964 Act, ranging from compulsory admission to hospital with restrictions on discharge to an absolute discharge.

A recent review of the Criminal Courts of England and Wales ("The Auld Report," 2001) recommended that new legislation be introduced to require a judge rather than a jury to determine the issue of fitness to plead. The review argued that the complex technical issues involved in determining fitness required the skills of a judge rather than a jury. However, at the time of writing, the legislation has not been reformed and fitness-to-plead trials in England and Wales are still heard by a jury.

In the UK, the number of cases found unfit declined after World War II. Before 1957 a finding of unfitness to plead represented one of the few ways a person who had committed murder could escape a conviction for which (until 1965) the mandatory penalty was execution. The introduction of the concept of diminished responsibility in the Homicide

Act 1957 (which enabled a charge of murder to be reduced to the noncapital offense of manslaughter under certain circumstances) led to a dramatic fall in the number of findings of unfitness. The limited disposal options outlined in the Criminal Procedure (Insanity) Act 1964 meant that those found to be under disability in bar of trial could potentially be detained in hospital for a longer term than they would have served if they had pleaded guilty and received a sentence of imprisonment. This serious consequence further reduced the number of fitness cases and the issue was usually only raised in grave circumstances. The Criminal Procedure (Insanity and Unfitness to Plead) Act 1991 extended the disposal options available to courts and made a number of lesser outcomes possible for those who were found unfit to plead. It is possible that this change may lead to a rise in the number of fitness hearings as the issue could begin to be raised in less serious cases. Home Office statistics suggest that there has been an increase in the number of patients admitted to hospital with restrictions under the legal category of unfit to plead over this period. In 1991 six patients were admitted to hospital compared with 44 patients admitted in 2001.

The Law on Fitness to Stand Trial in Commonwealth Countries

Countries formerly in the British Commonwealth retain the concept of fitness to plead. For example, in Canada, the Criminal Code permits the court, the accused, or the prosecution to determine whether an accused is fit to be tried. The criteria have also now been incorporated into the Criminal Code of Canada (1985, Section 2) and an individual is unfit to stand trial if he/she is:

> unable on account of mental disorder to conduct a defence at any stage of the proceedings before a verdict is rendered, or instruct counsel to do so, and, in particular, unable on account of mental disorder to:
>
> i. understand the nature and object of the proceedings,
> ii. understand the possible consequence of the proceedings, or
> iii. communicate with counsel.

It is presumed that an accused is fit to stand trial and lack of fitness must be proven on the balance of probabilities. It is not necessary that an accused be able to act in his/her own best interests or to be able to apply analytical reasoning, but it is necessary that he/she have "limited cognitive capacity to understand the process and to communicate with counsel" (*R.* v. *Whittle*, 1994). A person who satisfies these minimum standards may still be found at trial to have a mental disorder defense.

An individual found unfit to stand trial is subject to a disposition hearing. The Crown may not have proven beyond a reasonable doubt that the accused committed the criminal act and, as a consequence, judges have the power to postpone the determination of fitness until the Crown has made its case and the accused has been found not to be entitled to an acquittal or a discharge on grounds of mental disorder. If the accused is found unfit to stand trial, the prosecution must establish a *prima facie* case against the accused every 2 years until the accused is either found fit to be tried or acquitted because the prosecution cannot establish the case. These safeguards are designed to ensure that an innocent accused is not subject to detention in the same manner as an accused who committed the offense but was found not guilty by reason of mental disorder.

It was the case of *R.* v. *Taylor* before the Ontario Court of Appeal in 1992 that brought about the changes in Canadian law. In this case, a paranoid schizophrenic man was initially found unfit and detained under the jurisdiction of the Lieutenant Governor's Review Board, the overseeing body at the time. Taylor was subsequently found fit but not guilty by reason of insanity, though a new trial was ordered when another Supreme Court case (*R.* v. *Swain*) held that the Crown could not lead evidence of insanity. Taylor was again found unfit. The irony of the case was that Taylor was a qualified lawyer who had an excellent understanding of the judicial system but was unable, because of his paranoid delusions, to participate in the proceedings in his own best interests. The Court of Appeal quashed this decision of the Review Board and a new trial was ordered again. The Supreme Court reviewed the statutory criteria and concluded that the proper test in Canada is the "limited cognitive capacity" test and rejected the "analytic capacity" test, a clearly higher threshold. The court noted that "too high a threshold for fitness will result in an increased number of cases in which the accused will be found unfit to stand trial even though the accused is capable of understanding the process."

Using the "limited cognitive capacity" test an accused need do no more than meet minimal requirements as in the Criminal Code. This was reinforced in *R.* v. *Whittle*.

An "analytic capacity test" would require that the individual, in addition to demonstrating adequate understanding of the court processes and of his/her own predicament, be able to act in his/her best interests. This had been applied in a number of other cases previously.

Criticism of the "limited cognitive capacity test" have included the allegation that the courts have

failed to appreciate the extent to which distorted mental processes can interfere with an individual's ability to enlist normal self-preservation, a function not dependent on cognitive abilities but on motivation, insight, affect, and volition.

In Canada the law presumes that the evaluation for fitness, unless the accused would not meet the criteria for bail, can be undertaken out of custody. However, most cases are assessed in custody, often on a forensic psychiatric unit as, typically, an individual who is undergoing a fitness assessment will be sufficiently mentally disturbed to make this placement desirable.

Once an individual is found unfit to stand trial, the court may hold a disposition hearing to determine where the accused would best be placed. If the court does not make this determination, then the provincial review boards (constituted under the criminal code) must hold a hearing within 45 days. Such an individual will often be remanded to a designated mental hospital. One particularly useful provision under the Canadian criminal code is that an accused may undergo psychiatric treatment in order to restore fitness, even when he/she does not give consent, on application by the prosecution.

Competence to Stand Trial in the USA

In the USA, the notion of fitness or competence to stand trial was first given specific constitutional support by a series of Supreme Court decisions beginning in 1960 with the case of *Dusky* v. *USA* where, for the first time, the court provided criteria for competence to stand trial:

> The test must be whether he [the defendant] has sufficient present ability to consult with his lawyer with a reasonable understanding and whether he has a rational as well as factional understanding of the proceedings against him.

These criteria, though somewhat vague, comprise a cognitive component (capacity to comprehend relevant legal concepts and procedures) and a volitional component (capacity to utilize this information appropriately in one's own defense or function appropriately in the court proceedings).

Operationalizing these criteria has subsequently proven challenging.

Thus, in *Weiter* v. *Settle* (1961), a Missouri court developed a number of specific criteria and clinicians also attempted to develop checklists and other instruments to guide evaluators in providing uniformity among evaluations.

The Dusky test was superseded by the comprehensive Crime Control Act of 1984, which, although it only applies to federal crimes, reflects similar competency standards throughout the USA. Here,

> The defendant is presently suffering from a mental disease or defect rendering him mentally incompetent to the extent that he is unable to understand the nature and consequences of the proceedings against him or to assist properly in his defense.

In the USA, once a defendant is found incompetent to stand trial, he/she is usually sent to a forensic psychiatric hospital where he/she is treated until he/she becomes fit. Although these hospital admissions are usually limited to a few months, they can be extended indefinitely in cases of murder. In the US Supreme Court decision of *Jackson* v. *Indiana* in 1972, the court held that, "a person charged by a state with a criminal offense who is committed solely on account of his incapacity to proceed to trial cannot be held more than the reasonable period of time necessary to determine whether there is a substantial probability that he will attain the capacity in the foreseeable future." This has been widely interpreted to mean that the duration of commitment for treatment for competence to stand trial is limited to the maximum sentence provided for the crime charged, though some states, for example Wisconsin, limit commitment to the maximum sentence or 12 months, whichever is less.

Although the number of accused found to be permanently incompetent in the USA is very small, the limitations on commitments of these individuals, if charged with serious crimes, presents problems for the criminal justice system. This is because the states have limited options after the statutory maximum period of commitment for treatment to competence. Although release is certainly possible, in the case of serious crimes this is not usually a practical or reasonable alternative. Such defendants are typically committed under either civil commitment or guardianship statutes with a consequence that they may be subject to stricter criteria for continued commitment than if they had been detained under criminal commitment.

Subsequent Supreme Court decisions have involved other procedural matters. Thus it was held in *Godinaz* v. *Moran* (1993) that the ability of an accused to waive his/her constitutional rights required a higher competency than that required for fitness to stand trial, that is, the capacity to make reasoned choice among alternatives. Moran had originally pleaded not guilty to three counts of murder and was found competent to stand trial under the Dusky standard. He dismissed his lawyers and pleaded guilty, claiming that he would produce mitigating evidence at sentencing. Finding Moran "intelligent and knowing,"

the judge granted his request but found him guilty and sentenced him to death. Moran appealed and argued that he had been incompetent to represent himself. The Supreme Court held that the standard for waiving counsel is no higher than to stand trial. The competence involved is that of waiving a right, not the competence to represent oneself. It did hold that the waiver must be knowing (or intelligent) and voluntary.

In another murder case, the accused was found competent several times and, after being convicted and sentenced to death, appealed on the ground that the law placed too great a burden on the defendant. The state court of appeals affirmed this, holding that the state has a great interest in a speedy trial and that a truly incompetent defendant can easily establish his/her incompetence. However, the Supreme Court reversed this decision, finding that a burden higher than preponderance of the evidence violates the principle of "due process." The assignment of the legal burden indicated society's determination of the confidence the fact-finder should have in the factual accuracy of conclusions for a particular type of adjudication. A consequence of an erroneous decision is therefore much greater than the consequences to the state with respect to competence to proceed.

Unlike the UK, in the USA the absolute numbers of individuals found incompetent to stand trial has risen but it seems unlikely that comparative or percentage data have changed. On average, only 30% of defendants referred for competence evaluations are found to be incompetent and the great majority of those assessed are found to be competent. It has been found that a cluster of bizarre behavior at the time of the offense – psychosis, irrational behavior associated with substance abuse, and impaired orientation – correctly predicted 90% of competence determinations. Others have also found that psychosis and mental retardation are highly correlated with incompetency findings. Incompetent defendants are also more likely to be nonwhite and unmarried and to have less education, but most studies do not find these statistically significant. Not surprisingly, assessments of competence to stand trial in the USA are, as in Canada, among the commonest type of court referral for forensic psychiatric services.

Other Competencies

It must be appreciated that competence or fitness to stand trial is but one of a number of competencies or capacities that an individual must possess in relation to criminal proceedings. These include competence to waive Miranda rights (police cautions regarding statements made to them) and competence to confess, competence to plead guilty, competence to waive representation by counsel, competence to waive a jury trial, competence to waive appeals, competence to be executed, competence to testify, competence to waive extradition, to be evaluated, and to be sentenced.

Some have argued that the evaluation of fitness or competence is the single most significant mental health inquiry pursued in criminal law partly because of its frequency and the fact that financial resources are more than for any other class of forensic activity.

Competency Screening Tests

Basic though it may appear to be, a number of forensic mental health researchers have spent a great deal of time and energy on the problem of operationalizing and assessing fitness or competency. Instruments such as the Competency Screening Test, Competency to Stand Trial Assessment Instrument, the Fitness Interview Test, and others have all been published and in some jurisdictions are widely used. This is particularly the case in the USA where studies have consistently indicated that evaluations of competency often fall far short of professional standards. As a result, guidelines have been offered, including the use of recognized instruments, the acquisition of all relevant information, taking the context seriously, and careful testing of conclusions and substantiation with clear data and reasoning.

Alternatively, it could be argued that competency or fitness assessments are in many cases the means whereby courts essentially divert individuals who are obviously psychiatrically disturbed out of the courtroom and into mental health facilities. Certainly in Canada this phenomenon is widely seen, especially in cases involving relatively minor criminal behavior.

See Also

Detainees: Fitness to be Interviewed; **Forensic Psychiatry and Forensic Psychology:** Criminal Responsibility

Further Reading

Grubin DH (1991) Unfit to plead in England and Wales, 1976–1988. A survey. *British Journal of Psychiatry* 158: 540–548.

Home Office and Department of Health & Social Security (1975) *The Report of the Committee on Mentally Abnormal Offenders ("The Butler Report").*

Johnson S, Taylor R (2002) *Statistics of Mentally Disordered Offenders 2001.* Home Office.

Schneider R, Bloom H (1995) Taylor decision not in the best interests of some mentally ill accused. *Criminal Law Quarterly* 38: 183–205.