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Introduction

This chapter introduces a number of issues relevant to abnormal psychology, many of which are returned to in more detail later in the book. It starts by considering what is meant by abnormal psychology and how this relates to mental health. It looks at how these ideas have changed over time, before considering ways in which mental health problems are now conceptualized. The chapter then examines a number of factors that contribute to the development and differing presentation of mental health disorders, focusing on genetic, biological, psychological, social, cultural and familial explanations. Finally, it introduces the biopsychosocial approach, which attempts to integrate these various factors into one holistic model. By the end of the chapter, you should have an understanding of:

- Modern concepts of abnormality
- Historical concepts and treatments of abnormality
- Issues of diagnosis: the key diagnostic classification systems and their alternatives
- Models of the aetiology of mental health problems: genetic, biological, psychological, socio-cultural and systemic or familial
- The biopsychosocial approach.

Modern concepts of abnormality

This book focuses on factors that contribute to mental health problems and their treatment. Despite its title, it actually excludes many individuals who would be considered ‘abnormal’, if one were to define abnormal as ‘to differ from the norm’. Indeed, a number of simple definitions of abnormality may be proposed, none of which captures the essence of what is generally meant by the term abnormal in the context of mental health problems:

- Statistical abnormality implies that people who are statistically different from the norm are ‘abnormal’; the further from the norm one is, the greater the abnormality. While this may be true, it does not necessarily imply the presence of a mental disorder. People who are rich or highly attractive, those who engage in dangerous
sports or who significantly achieve in their career, all differ markedly from the norm. But none of these would be seen as having a mental health problem.

- **Psychometric abnormality** implicates abnormality as a deviation from a statistically determined norm, such as the population average IQ of 100. In this case, an IQ score less than about 70–75 may define someone as having a learning disability and suggests they will have some difficulties coping with life. However, the problems associated with a low IQ differ widely across individuals depending on their life circumstances. So, even when an individual is defined as psychometrically ‘abnormal’, this tells us little about their actual condition or problems. Furthermore, if one takes the other end of the IQ spectrum, a deviation of 30 points above the mean is generally not considered to be abnormal or to indicate the presence of mental health problems.

- **The Utopian model** suggests that only those who achieve their maximum potential within their lives are free of mental health problems. However, even those who propose this model (e.g. Rogers 1961: see Chapter 2) accept that only relatively few people truly achieve their maximum potential. Accordingly, this model assumes that the majority of the population deviate from their optimal mental state and experience some degree of mental health problems. Poor mental health may be considered the norm, not the exception.

- **The presence of abnormal or deviant behaviour** is perhaps the closest of the simple models to provide an understanding of abnormality as it relates to mental health problems, because it implies a deviation from normal behaviour in some ‘negative’ way. But as a single criterion it is inadequate. Not all people with mental health problems engage in deviant behaviour, and not all deviant behaviours are a sign of mental health problems: stealing a car and ‘joy riding’, which places many people in danger, may be considered deviant, abnormal, behaviour by many people, but it is not a sign of a mental health problem.

More complex models of abnormality in the context of mental health consider abnormal behaviour to be a sign of a mental health problem when

- it is the result of distorted psychological processes
- it causes or is the result of distress and/or is dysfunctional
- it is an out-of-the-ordinary response to particular circumstances.

A fourth criterion is that the individual may place themself in danger as a result of a distorted view of the world, although this is relatively infrequent even among those who may be thought of as having a mental health problem. These criteria can perhaps be summarized as the ‘four Ds’:

- deviance (from the norm)
- distress
- dysfunctional
- dangerous.
These generally hold true, but there are important exceptions. Paedophilia, for example, is not necessarily associated with personal distress, nor do people who engage in psychopathic behaviour experience remorse as a result of their actions.

Despite these criteria, which suggest some universality about what is and what is not a mental disorder, such judgements differ across social groups, societies and time. Definitions of mental disorders, deviance or abnormality are societally defined, not absolute. In some societies, people who see visions and speak to themselves are considered wise and to have special powers. In others, they are considered to have a \textit{psychotic} illness and to require treatment. In Puerto Rico, for example, a belief that one is surrounded by spirits is common; in the UK, such beliefs would probably result in an individual being treated for schizophrenia. It is noteworthy that the activity of joy riding provided earlier as an example of abnormal behaviour will be considered so only by some groups in society; others may consider this to be acceptable, even admirable, behaviour.

In some cases, odd behaviour may result in an individual being labelled eccentric – a more benign label than ‘mad’ or ‘mentally ill’. What label is assigned may vary according to the degree to which the individual differs from the norm, how many of their behaviours are abnormal, and the implications of these behaviours for others. However, the nature of the label assigned has powerful implications for the individual. Perhaps the most extreme example of this can be found in a classic study reported by Rosenhan (1973). In it, he taught a number of students to act as if they were psychotic – by stating that they heard one-word \textit{hallucinations} – in an attempt to study the processes of diagnosis and hospitalization. As Rosenhan predicted, most students were admitted into the hospital and assigned a diagnosis of schizophrenia. What was perhaps more surprising was that when the students dropped their disguise and admitted to the hoax, many of their psychiatrists took this to be further evidence of their ‘illness’. It took some weeks before some students were discharged from hospital, some with a diagnosis of ‘schizophrenia in remission’.

\textbf{Historical overview}

Explanations of ‘madness’ have existed for much of our history, and have varied markedly over time. Early Chinese, Hebrew and Egyptian writings ascribed bizarre behaviours to demonic possession. By the first century BC, biological explanations were predominant. Hippocrates, for example, considered abnormal behaviour to result from an imbalance between four fluids, or humours, within the body: yellow and black bile, blood, and phlegm. Excess yellow bile, for example, resulted in mania; excess black bile resulted in melancholia. Treatment involved reducing levels of the relevant fluids through a variety of means. Levels of black bile, for example, could be reduced by a quiet life, a vegetarian diet, temperance, exercise and celibacy. Although radical treatment approaches such as bleeding or restraint by mechanical devices were evident at this time, the first-line treatment of both ancient Greeks and Romans was generally humane, and included providing comfort and a supportive atmosphere.

By the Middle Ages, the dominance of religious thinking and the clergy resulted in abnormal behaviour once more being considered the result of demonic possession. Treatment was provided by priests and involved attempts to rid the individual of the
demon through prayer, chanting and administration of holy water or bitter drinks. More radical approaches included insulting the devil, starving, whipping or stretching the affected individual. Perhaps the most dramatic treatment of people supposedly possessed by demons was the Catholic Church’s *Malleus Maliform* (witches’ hammer) which provided a guide to the identification and treatment of witches, who were considered to blame for any ills that occurred within society. The manual stated that a sudden loss of reason was the result of demonic possession, and that burning was the one way to expel the devil.

Towards the end of the Middle Ages, power again shifted to the secular authorities and, as a result, biological theories of mental health problems once more became dominant. Institutions for the humane care of people with mental health problems were established. However, the initial success of these asylums led to them becoming overcrowded. As a result, the quality of care they provided gradually deteriorated and became increasingly inhumane. One of the most famous of these institutions was Bethlem Hospital in London. Here, patients were bound by chains and, in certain phases of the moon, some were chained and whipped to prevent violence. Restraints were cruel and inhumane. The hospital became one of the most popular tourist attractions in London, with people paying to see the crazed inmates: hence the term, Bedlam.

The care of mentally disturbed people changed once more in the eighteenth century. William Tuke in Britain and Phillipe Pinel in France re-established more humane treatments; although asylums remained, their inmates were able to move around them freely. Treatments included working closely with inmates, reading and talking to them and taking them on regular walks. Many people were released from hospital as a result of their improved condition. This ‘moral approach’ to the treatment of the insane was based on the assumption that if all those with mental health problems were treated with care, they would improve sufficiently not to need further care. However, as success rates did not achieve this optimistic level and it became clear that not all those treated in this way would be cured, prejudice against people with mental health problems increased. Long-term incarceration once more became the norm.

**Somatogenic and psychogenic perspectives**

In the early twentieth century, theories and treatments of mental disorders diverged into two approaches: the somatogenic and psychogenic perspectives. The *somatogenic approach* considered mental abnormalities to result from biological disorders of the brain. A highly influential advocate of this approach, Emil Kraepelin, constructed the first modern typology of abnormal behaviour (Kraepelin [1883] 1981). He identified various clusters of symptoms, gave them a diagnostic label and reported on their course. In addition, he measured the effects of various drugs on abnormal behaviour. Despite the rapid adoption of this approach, many of the interventions it led to, including remedies as diverse as tonsillectomy and *lobotomy* (see Chapter 3), proved ineffective. More recently, the biological approach has led to the development of powerful drugs used in the treatment of conditions as varied as depression, schizophrenia and anxiety disorders.
The psychogenic approach considered the primary causes of mental disorders to be psychological. It was initially led by an Austrian physician, Friedrich Mesmer. In 1778, he established a clinic in Paris to treat people with hysterical disorders. The treatment he provided, called mesmerism, involved the patient sitting in a darkened room filled with music. Mesmer then appeared dressed in a flamboyant costume and touched the troubled area of the individual’s body with a special rod, a treatment that proved effective in a number of cases. Despite this, he was considered a charlatan and eventually banned from holding his clinics in Paris. Other leading advocates of the psychogenic approach, Jean Charcot and then Sigmund Freud, used hypnotism in the treatment of hysterical disorders. Treatment typically involved hypnotizing the patient before encouraging them to identify the factors precipitating the onset of their symptoms and to re-experience their emotions at this time, a process known as catharsis. Freud later rejected this method in favour of free association and the use of psychoanalysis.

The latter part of the twentieth century saw a revolution in the treatment of mental health problems and a strengthening of both the biological and psychological approaches. Humanistic therapies advocated by Carl Rogers added to those of Freud and the analysts, as did the behavioural and cognitive behavioural approaches led by theorists and clinicians such as Hans Eysenck and Stanley Rachman in the UK, and Aaron Beck and Donald Meichenbaum in the USA and Canada (see Chapter 2). Psychological therapies now provide effective treatment for conditions as diverse as schizophrenia, depression and anxiety disorders.

Care in the community

Modern treatments have allowed thousands of individuals with chronic mental health conditions, who would have required hospital care in the first half of the twentieth century, to be treated in the community. The change from hospital to community care began in the UK in the 1950s, and reached its peak in the 1970s. Over this time, many people who had spent years, perhaps decades, in hospital were gradually moved back into the communities from which they came. This was not an easy process, as by the time these changes in care were enacted, many of these people had become totally institutionalized. Their behaviour was determined by the rules of the hospital, which were generally more accepting of deviance than the general population. They had limited self-care skills, as they had not been responsible for cooking, cleaning and other elements of self-care for many years. Often the impact of living in an institution was more disabling than the condition for which they had originally been hospitalized, which could have been as non-problematic as vagrancy or being an unmarried mother. As a result of these factors, people discharged into the community had to be taught how to survive outside the hospital environment. Without this, many struggled after discharge, ending up as ‘rotating door’ cases; that is, as quickly as they were discharged into the community, they were readmitted to the hospital.

To avoid these difficulties, modern treatment seeks to minimize the use of hospital facilities and to maintain people within the community in which they live. People with relatively minor mental health problems, including most people with anxiety or mild–moderate depression, are treated by their general practitioner in a primary care
setting. Even relatively serious mental health problems are usually treated through outpatient appointments or through visits to the individual’s home by members of multidisciplinary teams of health care workers. Admission to hospital occurs only at times of crisis or exacerbation of problems, with discharge back to the community as quickly as is reasonably possible.

Multidisciplinary teams are often led by a consultant psychiatrist who has medical responsibility for the care of their patients. They and the more junior doctors are medical graduates who have specialized in the care of the ‘mentally ill’. At the time of writing, they are the only members of the team who can prescribe medication, although many adopt other clinical interests and may be involved in the provision of other therapies. Nurses within the team have a specialized training in the care of people with mental health problems. They have a multifaceted role involving, among other things, monitoring an individual’s progress, recommending changes in medication, providing basic psychological therapies and acting as advocate for the patient. More specialized professions may also be involved in the provision of care. Occupational therapists can help the individual develop or maintain life skills such as cooking or strategies for coping with stress. Clinical psychologists provide therapy for people with complex problems, and support others in their therapeutic work with clients, through clinical supervision and training in therapy skills. Finally, social workers help the individual deal with social problems such as lack of money or unemployment that may contribute to their problems.

**Issues of diagnosis**

**The medical model**

This book is generally organized around a set of diagnostic labels that can be ascribed to people with common mental experiences or who behave in similar ways – schizophrenia, depression, and so on. The approach is rooted in the ‘medical model’, which assumes that mental health problems are the result of physiological abnormalities, generally involving brain systems. The disorder is considered as an illness, much as other medical problems are, and is therefore treated with physical treatments that modify the underlying biological disorder, the most common of which involves drug therapy. The type of treatment given is determined by a diagnosis, which is itself determined by the presence or absence of various signs or symptoms. This assumes that people with mental health problems are experiencing a state divorced from that of ‘normal’ individuals: a mental illness.

**Classification systems**

The historical roots of this approach lie in the work of Kraepelin in the late nineteenth century. He described a number of syndromes, each of which had a common set of symptoms which differed from those of other syndromes, in a classification system of mental health disorders which later formed the basis of the World Health Organization’s (WHO) International Classification of Diseases (ICD: WHO 1992). Indicating how such systems have struggled to accurately identify and classify mental health conditions, this is currently in its tenth revision. The American Psychiatric
Association (APA) devised its own classification system, known as the *Diagnostic and Statistical Manual* (DSM), which although having much in common with the ICD system, differs in a number of details. Like the ICD, it has changed over the years and, having first been published in 1952, is now in its fifth revision (*DSM-IV-TR*: APA 2000).

The DSM system is ‘multi-axial’. That is, it allows an individual’s mental state to be evaluated on five different axes:

- **Axis 1**: the presence or absence of most clinical syndromes, including schizophrenia, mood, anxiety, sexual and eating disorders.
- **Axis 2**: the presence or absence of stable long-term conditions, including personality disorders and learning disabilities.
- **Axis 3**: relevant information on the individual’s physical health.
- **Axis 4**: psychosocial and environmental problems.
- **Axis 5**: rating of an individual’s global level of functioning: from a score of 1 for persistent violence, suicidal behaviour or inability to maintain personal hygiene to 100, symptom-free.

These classification systems provide a number of benefits, not the least of which is an apparent simplicity — many would say an oversimplification — of definitions of mental health problems. In addition, they provide doctors and others using the system with a dichotomous outcome that fits the medical model of treatment. Whether an individual has an ‘illness’ or not will determine whether or not they are treated, admitted to hospital, and so on. Proponents of the medical model have argued that a reliable diagnosis that is consistent both within and between countries ensures that:

- any individual presenting with a set of problems will receive the same diagnosis across the world
- they will therefore receive the same treatment wherever they are in the world
- research that informs treatment focuses on the same condition wherever it is conducted.

Diagnoses are particularly important in relation to drug therapies where a diagnosis will determine which class of drugs is used to treat the presenting problem: anti-depressants for depression, **major tranquillizers** for schizophrenia, and so on. An incorrect diagnosis will mean that incorrect medication is prescribed. In the case of research, incorrect diagnosis will result in unreliable results from any treatment trial and confuse rather than help the development of new treatments.

Before considering how well the present diagnostic systems have achieved these goals, it is important to indicate some fundamental scientific and philosophical implications to this approach:

- The model implies a dichotomy between normal and abnormal mental states. An individual either is mentally ill or is not. This dichotomy is becoming increasingly
difficult to sustain. Many ‘abnormal’ states ascribed to the ‘mentally ill’ have now been found to occur to large numbers of the ‘normal’ population; many people who live normal lives and who have never been considered in any way ‘abnormal’, for example, report having heard voices in their head – almost a defining characteristic of schizophrenia.

- The model implies that when an individual is ill, they behave or experience mental events that are in some way abnormal and different from those of ‘normal’ people – an argument rejected by the findings of cognitive psychology. There is increasing evidence that while the thought content and behaviour of people with and without mental health problems may differ from the norm, the cognitive processes underlying them are essentially the same. This issue will be returned to on many occasions later in the book.

- The approach fails to recognize the experience of the individual; they are assigned a diagnosis and the diagnosis is treated, not the individual.

- The model implies that biological factors are primary in the development of mental health problems and that, therefore, biological treatments are also primary. This ignores findings that social and psychological factors appear to be critical in the development of mental health problems and that biological factors involved in mental health problems change as a result of changes in these factors (see Chapter 4). This also distracts from findings that pharmacological therapies may prove only partially effective in the treatment of a number of apparently biologically mediated conditions (such as schizophrenia, depression) and that psychological therapies have proved more effective than pharmacological interventions in the treatment of many conditions.

**Diagnostic consistency**

Despite the development of clear criteria for each disorder, making a diagnosis is not a clear-cut process. Even within countries, levels of agreement on diagnoses may be low. In the 1960s, Beck et al. (1962) reported only a 54 per cent agreement between four psychiatrists on the diagnoses assigned to 154 patients based on their own interviews. By the mid-1980s, things had not changed. Lipton and Simon (1985), for example, compared the diagnoses made by hospital doctors with those made by an inspection team in one psychiatric hospital. While 89 patients were assigned a diagnosis of schizophrenia by the hospital doctors, the review team assigned only 16 such diagnoses. Originally 15 patients were assigned a diagnosis of depression; 50 received this on review. The goal of DSM is to minimize the possibility of such errors, and each new edition strives to make the criteria for each diagnosis more clear-cut. Its latest version, DSM-IV-TR (APA 2000), has been tested by a number of clinicians to ensure consistency of diagnosis, although its reliability still has to be formally assessed.

What even a clear diagnostic system may have difficulty in dealing with are the biases that clinicians bring to the diagnostic process. Clinicians may reach varying diagnostic decisions as a result of the different information they obtain either as a result of their consultative style or the biases they bring to the assessment. Diagnoses may also be influenced by clinicians’ knowledge of the disorder or any previous
diagnoses made by other doctors, the frequency with which the doctor has encountered the condition, and the costs and benefits of giving a diagnosis. Under conditions of uncertainty, for example, clinicians may diagnose a condition that they feel is likely to benefit the patient most and harm them least, even if it is wrong.

**Diagnostic validity: schizophrenia**

Validity of classification labels can also be difficult to achieve. Perhaps the most controversy lies with the diagnosis of schizophrenia. One of the important criteria for the diagnosis of schizophrenia when first identified by Kraepelin was that it was a progressive and deteriorating condition with no return to levels of functioning achieved before its onset. Bleuler (1908) later identified four fundamental symptoms of what he termed the group of schizophrenias: ambivalence, disturbance of association, disturbance of affect, and a preference of fantasy over reality.

Subsequent diagnostic systems have, until recently, adapted Kraepelin and Bleuler’s diagnostic categories, and attempted to develop increasingly clear and unambiguous diagnostic criteria for various sub-types of the disorder. Until the mid-1990s, DSM-III (APA 1987) identified four types of schizophrenia:

- **Simple**: progressive development of ‘oddities of conduct’, an inability to meet the demands of society, and withdrawal from everyday life.
- **Paranoid**: stable, paranoid delusions, frequently accompanied by auditory hallucinations that support these delusional beliefs.
- **Catatonic**: marked psychomotor disturbances, switching between extreme excitement, stupor and waxy flexibility in which the individual may be placed in a position and maintain it for several hours.
- **Hebephrenic**: changes in mood and irresponsible and unpredictable behaviour, accompanied by disorganized thought processes and speech that is frequently rambling and incoherent.

Unfortunately, this categorization disregarded any form of causal theory of linkages between the various symptom clusters, and may have actually inhibited our developing understanding of the nature and treatment of schizophrenia. A more useful classification system has now been derived from consideration of the causes of the symptoms of schizophrenia.

Factor analysis of the signs and symptoms of the various sub-types of schizophrenia has identified three clusters of symptoms, known as disorganized symptoms, positive symptoms and negative symptoms (Liddle et al. 1994) that tend to co-occur. The positive cluster includes hallucinations, delusions, disorganized speech or positive thought disorder. Negative symptoms denote an absence of activation, and include apathy, lack of motivation or poverty of speech. Disorganized symptoms include disorganized speech and behaviour, and flat or inappropriate mood. These may have differing biological and neuropsychological foundations, and prove a more useful way of categorizing the various schizophrenic-type disorders (see Chapter 6).

Even if diagnostic criteria have both high reliability and validity, they carry some negatives. Perhaps the most important is that the process of diagnosis implies the
individual has an ‘abnormal’ medical condition. They ‘medicalize’ individuals and place them within the remit of the mental health profession, sometimes quite inappropriately. Until 1973, homosexuality was listed as a sexual disorder within DSM, legitimizing attempts at treatment and legislation against homosexuals. Now, the criteria for personality disorder include within them a number of characteristics that many would argue should be considered as personality styles, not mental disorders (Widiger and Costa 1994: see Chapter 11).

**Cultural relativity**

One important goal of DSM is to identify and diagnose mental health problems in a similar way across cultures. The approach assumes that medical illnesses will present in a universal way throughout the world. Whether this is actually the case is questionable. Work by the World Health Organization (1979), for example, suggested that people who develop schizophrenia presented in the same way in nine different countries. Their study was, however, compromised by their use of the same set of criteria to determine whether people had or had not schizophrenia in each country, and their exclusion from this diagnosis of those who presented with differing symptoms. Accordingly, while these data suggested that some people do present with similar problems across the world, they could not exclude the possibility that other people with the same underlying problems may have presented in quite different ways.

One way in which people from different cultures have been found to present quite differently is through the reporting of negative emotions in terms of psychological or physical factors. Somatization involves the presentation or experience of physical problems rather than emotional ones: ‘My heart is burning’, for example, may imply depression or anxiety. This type of reporting is relatively rare in western cultures, and very common in Asian cultures and countries such as Turkey, possibly because such cultures disapprove of the strong expression of emotions, particularly negative ones (Chen 1995). Seeking help for physical problems therefore becomes an acceptable route for help with psychological ones. This cultural relativism indicates that it may be inappropriate to assume that a set of diagnostic symptoms may be appropriate for all cultures and at all times. This issue is considered in more detail in Chapter 4.

**A social critique**

In addition to the scientific critique, a number of social commentators have raised strong ethical objections to the medical model. Farber (1990), for example, argued that the medical model underestimates the individual’s capacity for change, and consequently inhibits this capacity. At its most stark, the model assumes that unchangeable biological factors lead to psychological states that are distinct from the mental processes of ‘normal’ individuals. These may remit, either as a result of treatment or through natural recovery, but the individual is still prone to further episodes of the disorder.

Farber identified two types of medical models: one that assumes that mental disorders are the result of genetic and biological factors and the psychoanalytic model that assumes the adult disorders are the result of psychological, but biologically driven, mental structures that are set down in childhood and are unchangeable over the life course. He saw the ethical danger of the medical model in its legitimization of the health
care professions’, and therefore the state’s, control of people considered as disordered. Perhaps the most extreme example of this has been various extreme left- and right-wing governments’ use of psychiatry to control its dissenters. According to Farber, the medical treatment that people with mental health disorders receive prevents them from self-change and serves to reinforce assumptions that they are not capable of self-development and change. He also contended that such treatment is coercive, and that any attempt at self-change is viewed negatively and resisted: the patient who wishes to discontinue medical treatment, for example, is told that this is a sign that they are resisting treatment, and that they do not want to get ‘well’. Only the experts know when people who are mentally ill are well enough to make authentic choices.

Having provided such a critique of the medical model, the astute reader may now be asking why the book is organized around a set of diagnoses which may be so seriously questioned. Their use here perhaps reflects both a dilemma and one of the reasons for their continued use by psychologists and others that reject the medical model. They provide a shorthand means of orienting the reader to the content of each chapter. However, their use does not imply an acceptance of the medical model – even the ‘reality’ of the conditions described within them is occasionally questioned – and while biological explanations for each disorder are provided, this certainly does not indicate that these are considered their primary cause.

Alternatives to the medical model

Any alternative to the medical model needs necessarily to differ from it on some important dimensions. In particular, it needs to do the following:

- consider there to be no dichotomy between abnormal and normal mental states
- consider the social and psychological processes that lead to and accompany any mental health problems
- make the affected individual (and not their diagnosis) the focus of any assessment and treatment
- at least consider non-pharmacologically based interventions as primary.

Two alternative approaches that address these issues, at least to some degree, are the dimensional approach and psychological formulation.

**Dimensional approaches**

While accepting the benefits of some form of diagnostic system, a number of commentators (e.g. Widiger and Costa 1994; Clark et al. 1995) have challenged the categorical approach adopted by the DSM. In DSM, diagnoses are based on the presence of a number of symptoms, such as poor sleep, feeling depressed, and so on. It provides a categorical classification: the individual either has the symptoms, and therefore a disorder, or does not. A dimensional approach rejects this all-or-nothing approach and the assumption that the mental states of people with a mental health problem are distinctly different from those of the ‘normal’ population. Proponents of the dimensional approach argue that categorical models of psychopathology are challenged by a number of problems, including:
• co-morbidity, in which a single person might satisfy criteria for more than one diagnosis, such as schizophrenia and affective disorder
• heterogeneity, in which two people with the same diagnosis can present with entirely different patterns of symptoms (see, for example, the discussion of diagnoses of schizophrenia in Chapter 6)
• the provision in DSM of a subcategory of ‘not otherwise specified’, which seems to be a mechanism for assigning diagnoses that do not really ‘fit’.

The dimensional approach suggests that people who are now diagnosed as having a mental disorder may better be considered to be at the extreme end of a distribution of normality, not categorically different from others. Many of us have been anxious or depressed at one time or another, felt like not engaging with the world, or slept poorly. These experiences are not unique to people with a depressive disorder. Whether or not we consider them to be problematic is dependent on their frequency and the intensity to which they are experienced. Dimensional approaches adopt this approach, and suggest it is the degree to which problems are experienced, not merely their presence or absence, that determines whether or not an individual has a mental health problem. This approach fits well with increasing findings that some ‘symptoms’ of mental health disorders, such as hearing voices, are relatively common within the general population, and may never lead an individual to seek help or impair their everyday living (see Chapter 6). As a compromise with the diagnostic approach, proponents of the dimensional system suggest that if an individual scores above a threshold score, based on the severity and frequency of their experiences, they may be given some form of diagnosis.

The dimensional approach has a number of strengths. In particular it highlights which aspects of a person’s life are problematic and for which they may require some form of help, and avoids ‘forcing’ the presenting problems into a diagnostic category into which they do not easily fit. What it does not address is the processes through which an individual developed their problems or an understanding of the factors that maintain them. This level of assessment is provided by the psychological formulation.

**Research box 1**


The authors note that the ‘types versus dimensions’ issue – whether mental health problems are ‘a matter of degree or kind’ – is of considerable importance in developing and evaluating a diagnostic system such as DSM. They note that current psychiatric diagnostic structures consider depression to be a qualitatively distinct disorder; that is, the experience of depression is categorically different from any other mental state. By contrast, a number of researchers have argued that depression may best be viewed as a deviation from ‘normal’ affective experience – the dimensional view. The goal of the reported research was to evaluate the extent to which major depression
among young people, as defined by DSM-IV, is categorical or dimensional by using a form of statistical analysis developed by Meehl which allows the validity of these differing models of psychopathology to be assessed.

Method

The study sample comprised 845 young people aged between 9 and 17 years from Atlanta, USA. The age distribution of the sample was uniform across the age range. Part of the sample was drawn from a larger study known as the Georgia Health and Behavior Study. A second sample taken specifically for this study was also obtained. For both studies, a stratified random sample of households was selected from the population of addresses in Georgia. Researchers then visited each house to screen for the presence of eligible individuals. If a young person lived in the house, they and a carer were asked to participate in the study. If they agreed, they were paid a small sum and interviewed in the family home. The overall response rate was about 74 per cent.

Clinical interview

The young people and carer (who were asked about their child) were interviewed using the investigational version of the Child and Adolescent Psychopathology Scale (I-CAPS), which assessed all of the symptoms of major depression as defined by DSM-IV. Respondents rated the I-CAPS items on a 4-point response scale that ranged from 1 (not at all) to 4 (very much). They rated each symptom according to how well it described their (or their child’s) emotion or behaviour, how often such symptoms occurred, and how serious the symptom was over the past 12 months. Several questions tapped each symptom. For example, for the symptom of fatigue or loss of energy, the authors averaged the following I-CAPS items: (a) sluggish and tired; (b) tired out by little things; (c) sluggish and not energetic; and (d) had less energy than usual.

Statistical procedures

One way in which the authors addressed the dimension versus category issue was by analysing the interview data using an analysis known as Maximum Covariance-Hitmax (MAXCOV or MAXCOV-HITMAX). This analyses the covariance between two variables as a function of a third variable. The function characterizing these conditional covariances is called a MAXCOV function and its shape depends on the status of the latent variable (in this case each symptom of depression) under study. If the latent variable is categorical (i.e. depressed individuals had the symptom, non-depressed individuals did not), the MAXCOV curves tend to have a mountain-like peak. If the latent variable is continuous (i.e. if the symptoms were present to a lesser or greater degree in both depressed and non-depressed individuals), the MAXCOV curves tend to resemble a flat line.

Results

MAXCOV analyses were conducted on the nine symptoms of DSM-IV major depression. Overall, the derived MAXCOV curves were more similar to those expected under a dimensional model than a categorical one. Figure 1.1 illustrates the average MAXCOV curves for data based on youth (a) and parent reports (b). The shaded regions of the graphs show the range of MAXCOV functions that should be observed
under if the various symptoms were dimensional in nature. The spiked line represents the type of graph that would imply the symptoms were categorical. The data (marked with dots) clearly follow the pattern expected in a dimensional patterning of symptoms.

### Figure 1.1
Average MAXCOV curves, (a) youth reports, (b) parent reports

### Discussion
The findings of this study suggest that depression in young people is continuously, not categorically, distributed. This finding held for both youth and parent reports, and for all DSM-IV depressive symptoms, and across gender. The current diagnostic system and nomenclature, used by DSM-IV and all other diagnostic systems, assume that disorders, such as depression, are categorical. The authors’ findings, as well as other studies, argue against DSM’s categorical emphasis for depression in children, adolescents and adults. The authors therefore concluded that dimensional approaches may be valuable for studying and assessing depression. Indeed, if individual differences in depression really are continuous, but researchers continue to use categorical measurement models, the empirical study of depression may suffer.
Psychological formulation

Diagnostic criteria are helpful in determining the pharmacological treatment that may benefit an individual. They are of less benefit to therapists using other treatment approaches. Here, any diagnostic label simplifies and reduces the information it carries to a degree beyond that which is useful. At its most basic, a clinician adopting a biological model of mental health disorders would aim to give a diagnostic label to a cluster of symptoms, and then provide the drug treatment related to that condition. The exact nature of the problems an individual faces or how they are expressed will be of only secondary interest. A person with schizophrenia who is hallucinating will be treated with drugs that stop hallucinations; the nature of the hallucinations will not influence the drug treatment given. A depressed individual will receive antidepressants regardless of the nature and causes of their condition.

A quite different view is taken by psychotherapists. From their perspective, the nature of the hallucinations or conditions that led to a period of depression are of paramount importance, and are the focus of any intervention. The diagnostic label assigned has little impact on the type of treatment given. A psychotherapist working with someone who is experiencing hallucinations, for example, would want to know their exact nature and content so they can apply specific techniques tailored to the specific needs of the individual to help them cope or respond to them more appropriately.

Psychological formulations attempt to identify the processes that led to and maintain the problems an individual is facing. These may be external: negative life-events, rape, bereavement, and so on. They may be internal: distorted interpretations of the world, hyperventilation leading to panic disorder, and so on. They may be short-term or longer-term sequelae to childhood events such as sexual abuse or poor parental relationships. The goal of the therapist is to identify the specific factors that have led to and are maintaining the problem for the particular individual they are working with at the time. These factors then become the target for future interventions.

A formulation is an explanatory hypothesis about the nature of the clinical problem. This usually reflects the theoretical orientation of the therapist. For a cognitive therapist, it will address the nature of faulty cognitions or maladaptive behaviours, how they were established, what maintains them, and so on. A Freudian analyst would be concerned with how an individual’s behaviour is linked to unconscious processes and their developmental history. It includes a number of ‘best guesses’ and the causes of the problem, what is maintaining it, and how it may be resolved. The formulation has two main functions: first, to guide the therapist in what to do, and second, to help establish criteria for evaluating the intervention: to determine what the goals of therapy are and how success or failure in achieving these goals is measured. Formulations are not static. They may well change in the light of new evidence gained over time, as will the focus and form of any intervention.

Formulations are guided by theory. These guide the questions asked by a therapist and the formulation of the problem they establish. This, of course, is both a strength and a weakness. A strength because they allow the therapist to select, in a relatively parsimonious way, from the myriad of potential contributors to a problem those most likely to be relevant. A weakness because they may focus the therapist too exclusively
on what they deem to be important aspects of a client’s experience and too little on what may actually be important, but seem irrelevant to the therapist as a result of their theoretical ‘blinders’. On this basis, some have argued that good therapists are aware of several aetiological models and can either integrate them into a meaningful synthesis or identify which are relevant to particular clients.

The aetiology of mental health problems

There are a number of diverse literatures focusing on risk factors for mental health problems. These do not act independently, but combine in some way to influence the risk an individual has for developing a disorder. The rest of this chapter provides an introduction to each type of explanation. The following chapters examine the issues in more detail in relation to specific disorders.

- **Genetic models** consider how genetic factors influence an individual’s risk of developing a mental health disorder. Genetic factors have been implicated in conditions as varied as schizophrenia, Alzheimer’s disease and depression.

- **Biological models** focus on biochemical processes, usually involving chemicals known as neurotransmitters, which mediate mood and behaviour. They also consider how damage to the brain can result in a number of mental health disorders.

- **Psychological models** focus on the internal mental processes that influence mood and behaviour. Unlike the genetic or biochemical models, there is no single explanatory paradigm. Instead, there are a number of psychological explanations of mental health disorders, the best known being psychoanalytic, humanistic, behavioural and cognitive behavioural.

- **The socio-cultural approach** focuses on the role of social and cultural factors in mental health disorders.

- **Systemic models** focus on the role of smaller social systems, frequently the family, in which the individual is situated. Disorders are considered to be the consequence of stressful or disordered interactions with families.

- **The biopsychosocial approach** attempts to integrate these various factors into a holistic causal model. This approach suggests that genetic or other biological factors may increase an individual’s risk of developing a mental health disorder. However, whether the disorder will actually develop depends on whether the ‘at risk’ individual encounters factors such as social or family stress and/or whether they have the coping resources to help them cope with such stresses.

Genetic models

With the exception of egg, sperm and red blood cells, each of the approximately 100 trillion cells of the body contains two complete sets of the human genome: one set from the individual’s father, the other from their mother. Each genome comprises 23 pairs of chromosomes. Each set of chromosomes carries the 60,000–80,000
genes that contribute to both the physical and psychological characteristics of the individual.

Each gene in a set of matched genes affecting the same processes is known as an allele. The instructions in the sets of genes from each parent may be the same or quite different, for example, blue versus brown eyes. Where the alleles are the same, the individual is described as homozygotic. Where they differ, they are termed heterozygotic. The expression of these ‘competing’ genes is determined by whether the genes are dominant or recessive. Some genes, such as those determining the eye colour brown, are described as dominant. When linked to a gene with other instructions they are expressed. Recessive genes are expressed only when matched with other recessive genes with the same instructions. The development of most mental health disorders is associated with recessive genes. If they were the result of dominant genes, their expression in each generation would be virtually guaranteed, resulting in continuing disadvantage and limited chances of reproduction.

Genetic studies of the aetiology of mental health problems have done so using several methods. Family studies measure whether those with genotypes that are more or less similar to the affected individual are at different risk for the disorder. If there is a genetic linkage in a disorder, one would expect someone with an identical genetic make-up (a monozygotic (MZ) twin), to be more likely to develop the disorder than a non-identical or dizygotic (DZ) twin, who has roughly 50 per cent of genes in common, who in turn would be more at risk than a cousin or aunt with even less genetic similarity. Many family studies focus on the degree to which both MZ and DZ twins develop the same disorder. Where more MZ than DZ twins are concordant for the disorder, this is taken to imply some level of genetic risk. This approach has a number of limitations. Critically, not only do closer family members share more genes, they also share a more common environment. MZ twins, for example, tend to be treated more similarly than DZ twins. Any concordance for a condition may therefore be attributable to a shared environment rather than shared genes.

In an attempt to separate out environment from genetic factors, a number of studies have examined concordance rates in twins brought up in differing environments, usually as a result of adoption. This method typically identifies MZ twins separated close to birth and examines whether they are or are not concordant for the condition under examination. It is assumed that because the separated twins have a common genetic make-up and different environments, any concordance for the condition under examination is the result of genetic factors. However, there are a number of reasons why any heritability coefficient determined by this method may not prove totally accurate. First, even twins that are separated have factors other than their genes in common. If nothing else, they have shared the same prenatal experiences that may determine risk for various disorders.

Another factor that can result in overestimation of genetic risk involves any genetic influence on the behaviour of a child, particularly where they are ‘difficult’ or ‘problematic’, instigating similar reactions from those caring for them. As a result, separated children may experience both a common genetic heritage and a common family background, despite their separation. Where the family reaction is one that itself contributes to risk for emotional or behavioural problems, this may result in high
levels of concordance between twins being attributed solely to genetic factors using traditional analytical methods.

This kind of interpretive problem has resulted in new methodologies in this type of study. Rather than assume the nature of the environment in which the person lives, they have now begun to measure genetic, environmental, social and other life stresses. These data are then subject to statistical modelling techniques that allow the investigators to determine the degree to which both genetic and environmental factors contribute to the development of the disorder under investigation.

This type of research is able to identify the strength of any genetic linkage, but not isolate the nature or location of the gene or genes involved. Work on the human genome now permits this more fundamental research. Most disorders are likely to result from a number of genes (that is, they are polygenic), and in some cases problems may arise from the absence of a gene, rather than its presence. There is evidence, for example, of a gene locus on chromosome 4 that may be protective against alcohol problems. Whatever the genetic linkages found, there is a general consensus that genes, at most, influence risk for a particular mental health disorder. It is also important to note that while risk for a particular disorder may be increased as a result of genetic factors, many if not most people with the disorder will not carry the relevant gene. Eighty-nine per cent of individuals diagnosed with schizophrenia, for example, have no known relative with the disorder. Not carrying the gene that increases risk for a disorder does not mean that you are immune to that disorder.

Despite this lack of absolute determinism, genetic technologies carry a number of social consequences. At its most extreme, social and political groups such as the Eugenics movement in the late nineteenth and early twentieth centuries advocated the use of selective birth control and sterilization to rid the nation of ‘national and racial degeneracy’ that was thought to result in mental illness, feeble-mindedness, criminality, alcoholism and sexual promiscuity. Ideas such as this gained widespread political support in the mid-twentieth century, and were used by Hitler to justify the mass extermination of people with mental health problems or learning difficulties.

The potential for testing for genes that confer risk of both physical and mental health problems also carries a number of challenges to modern society. At present, screening programmes for genetic risk of disorders such as cystic fibrosis, Huntington’s disease, and breast, ovarian or colo-rectal cancer are now being widely instituted. These testing programmes bring with them a whole series of ethical dilemmas. The UK testing programme for genetic risk of breast cancer, for example, rates people as being at low (population), moderate or high risk of developing breast cancer. We are now learning how a generation of men and women cope with knowledge of their risk of this disease. So far, it seems that it is not easy, and testing seems to evoke high levels of health anxiety among vulnerable individuals in both the short and the long term (Brain et al. 2002). At a societal level, the likelihood of genetic screening for medical insurance and even job selection is increasing. Will genetic testing result in an underclass that will find it difficult or impossible to get insurance, buy a house, or even hold a job? Time will tell.
Biological models

Biochemical explanations of mental health problems focus on the biological processes underlying mood and behaviour. Both are regulated by brain systems, whose actions are mediated by neurotransmitters. These systems allow us to perceive information, integrate that information with past memories and other salient factors, and then respond emotionally and behaviourally. Disruption of these systems as a result of inappropriate neurotransmitter actions results in inappropriate perception, mood and behaviour. The exact nature of the systems and the neurotransmitters involved in different mental health problems are considered in more detail in Chapter 3 and in each of the chapters in Part II of the book.

Other biochemical processes have been implicated in some conditions. Hormones such as melatonin appear to be involved in the aetiology of seasonal affective disorder, a type of depression considered in Chapter 8. Other disorders may be the result of problems in the architecture of the brain. Some of the symptoms of schizophrenia, for example, may arise from degeneration or failures of brain development that lead to fundamental errors in information processing, and disordered thoughts and behaviour. Alzheimer’s disease results from progressive neuronal damage evident through the deterioration of cognitive functioning in later life.

Biochemical models are often considered to be in opposition to psychological explanations: mental health problems are seen as either psychological in nature or to have a biological cause. A more appropriate way of thinking about the two approaches is that they provide different levels of explanation, somewhat analogous to the levels of explanation provided by physics and chemistry. Biochemical processes underpin all our behaviour at all times. The act of writing this sentence is activating numerous sensory, motor and neuronal processes, all of which are mediated by chemical transmissions. But understanding these fundamental processes explains only part of the behaviour: it does not easily account for the motivation for writing the sentence, the process of mental construction of the sentence, or, indeed, my mood as it was written. To understand these, one needs to address the psychological processes driving the behaviour. In this way, both biochemical and psychological explanations of the behaviour are ‘correct’.

Psychological models

In contrast to the biochemical and genetic models where most scientists and practitioners believe in a common process through which mental health disorders arise, there are many psychological models. There are many ‘fringe’ therapies, most of which have little or no theoretical rationale and whose practice may be somewhat dubious. There are also a number of ‘mainstream’ theories of mental health disorders and related treatments which largely reflect the development of more general psychological theories over the past century. The first psychological therapy to be practised was psychoanalysis in the beginning of the twentieth century, with Freud and his followers being the leaders of this movement. This was the dominant therapy for a number of years and is still practised, albeit with some modifications, over 100 years after its inception.
Psychoanalytic principles were rejected by two therapies, both of which began in the 1950s and 1960s. **Behaviour therapy** (e.g. Wolpe 1982) rejected the notion of psychic processes influencing mood and behaviour and the unscientific nature of psychoanalysis. Its practitioners argued that behaviour is largely controlled by external events, and based its principles on the ‘hard’ science of classical and operant conditioning. At a similar time, humanistic therapies (Rogers 1961) rejected psychoanalysis, not because of its psychic nature, but because of the *nature* of its psychic phenomena. In contrast to psychoanalysis which assumes that behaviour and mood are influenced by past traumas, humanistic therapies are based on the assumption that behaviour is driven by aspirations towards the future, with the potential of **self-actualization** available to all. Therapy was designed to help the individual achieve their potential, not to resolve the traumas of the past.

The most widely practised therapy is a derivative of behaviour therapy, known as cognitive or cognitive behavioural therapy (Beck 1977). It considers our thought processes, or cognitions, as the prime determinant of behaviour and mood. It makes no assumptions of past trauma or future aspirations and is not based on a model of personality as are psychoanalysis and humanistic therapies. Instead, it focuses on how the thoughts we have at any one time influence mood and behaviour. It assumes that the cognitions that result in mental health problems are somehow ‘faulty’ and dysfunctional. Therapy focuses on changing them to more functional and less inappropriate ones through a number of educational and therapeutic strategies. It also retains a strong behavioural focus: distorted cognitions, for example, may be challenged by behavioural experiments designed to illustrate errors of thinking. Each of these models is described and discussed in more detail in Chapter 2 and the chapters in Part II.

**Psychotherapy versus pharmacotherapy**

It is possible to argue that, because biochemical processes underpin behaviour at a fundamental level, altering the levels of neurotransmitters that influence mood through pharmacological processes provides the most direct and effective form of treatment of mental health disorders. While there is some logic in this argument, it certainly does not hold for all cases and it implicitly assumes that psychological therapy does not influence the fundamental biological processes underpinning mental health disorders. This is not the case: there is a powerful reciprocity between the two forms of treatment. Psychological treatments cause changes at the biochemical level: otherwise they would not alter mood. Similarly, **pharmacotherapy** alters cognitions and behaviour, the primary targets of most psychological interventions.

One argument favouring the use of psychological therapy is that many of the drugs prescribed are effective only while they are being taken. Once a course of drugs has finished, their action stops and the individual’s biochemical status, and hence mood and behaviour, may revert to the state it was in before the treatment was commenced. To prevent this, many people are now being prescribed drugs such as antidepressants for much longer than was initially considered to be necessary. In contrast, some have argued that psychological therapy prepares the individual to cope with the stresses they face now and in the future, making them at significantly less risk of relapse once therapy is terminated.
Both arguments may be overstating the case. There is good evidence that many people maintain good mental health following cessation of pharmacological treatments, although the reasons for this may be more psychological than pharmacological. A depressed individual who has withdrawn from family and social life, for example, may benefit from a drug treatment that helps them re-engage with people and enjoy life more. The pleasure gained from this may, itself, increase levels of the neurotransmitters that prevent depression (serotonin and norepinephrine: see Chapter 3) and maintain them in a healthy state once drug therapy is stopped. If they had not re-engaged so positively, the risk of relapse may have been much greater.

It is also true that some individuals do not benefit from psychological therapies, or they relapse following successful psychological treatments. They may find it difficult to adopt a psychological approach to reducing their problems. They may forget, be unable to use the new skills they have learned, or feel so overwhelmed by circumstances that they once more experience a deterioration in their mental health. For this reason, some advocates of psychological therapy suggest the need for ‘booster’ sessions some months after the completion of therapy to help maintain a positive mental state.

Both pharmacological and psychological therapies are effective in treating most mental health conditions. Psychological therapies seem to be more effective than drug treatments in treating conditions such as anorexia, panic disorder and some sexual problems. In contrast, although psychological treatments are increasingly being used in the treatment of schizophrenia, the mainstay of treatment remains drug therapy. The relative effectiveness of the two forms of treatment for some conditions such as depression is still hotly debated (see Chapter 8). This debate is returned to in more detail in Chapter 3 and in each of the chapters in Part II of the book.

Socio-cultural models

All the models so far discussed assume that mental disorders arise as a result of problems within the individual, be they genetic, biochemical or psychological. By contrast, the socio-cultural approach assumes that external, social factors contribute to their development. Socio-cultural factors include a wide range of influences, from the family to wider socio-economic factors, some of which were identified in the British Psychiatric Morbidity Survey (Jenkins et al. 1998). This revealed increased rates of depression or anxiety among women, those living in urban settings, unemployed people, and those who are separated, divorced or widowed. Psychoses were more prevalent among urban than rural dwellers. Alcohol dependence was nearly twice as common among people who were unemployed than among those who were employed: drug dependence was five times greater among those who were unemployed than those in jobs. People who are members of ethnic minorities or in the lower socio-economic groups are also more likely to experience depression, non-specific distress, schizophrenia or substance abuse problems than those in other sectors of society (Ulbrich et al. 1989). A number of, sometimes competing, theories to explain these differences have been proposed, each of which is discussed in more detail in Chapter 4.
**Socio-economic status differences**

- **Social drift**: this approach suggests that high levels of mental health problems among the lower socio-economic groups are the result of affected individuals developing a mental health problem, which renders them less economically viable. They may be unable to maintain a job or the levels of overtime required to maintain their standard of living, and drift down the socio-economic scale. That is, mental health problems precede a decline in socio-economic status.

- **Social stress**: this approach assumes that living in different socio-economic conditions results in differing levels of stress: the lower the socio-economic group, the higher the stress. That is, the stresses associated with social deprivation result in mental health problems.

- **Lack of resource model**: similar to the social stress model, this model assumes that those who are economically deprived have fewer resources to help them cope with any life demands they face. These resources may be economic, psychological, social or environmental. Poor mental health is thought to be a direct consequence of a lack of resources.

**Gender differences**

- **Willingness to express distress**: one theory is that gender differences in the prevalence of mental health problems are more apparent than real, and result from women’s willingness to visit their doctor and complain of mental health problems. This theory has not been substantiated (Weich et al. 1998).

- **Role strain**: an alternative hypothesis suggests that women encounter more role strain and spillover between the demands of work and home than men. The resultant stress places them at increased risk for stress and mental health problems.

**Minority status**

- **Confound with social class**: this model suggests that the apparent relationship between minority status and mental health problems is spurious. It suggests that people in ethnic minorities largely occupy the lower socio-economic groups. That they also have higher levels of mental health problems is a result of this association, not of being a member of an ethnic minority per se.

- **The effects of prejudice**: this suggests a more direct link between ethnic minority status and mental health. Mental health problems may result from the additional stresses, including overt and covert prejudice, experienced by the members of minority ethnic groups.

- **Cultural transitions**: a further source of stress may be the tension experienced as individuals adopt or reject some of the norms of their own or other cultures. Both may result in feelings of alienation, rejection by members of differing cultures, and consequent mental health problems.

Social and cultural factors may also influence the type of problems people report, and how acceptable, or unacceptable, they are within a society. Some
cultures positively affirm what might be considered hallucinations and signs of mental disturbance in others. People from different cultures may also report what we define as mental health problems in many different ways – and seek different treatments for them. Asian people, for example, often report mental distress framed as physical symptoms and their first line of treatment may involve herbs or other natural physical treatments. These issues are considered in more detail in Chapter 4.

Thinking about . . .

Most strategies for reducing the burden of mental health disorders have focused on treatment once they have developed. The importance of social and cultural factors points to another way of addressing the issue: to reduce the social, economic and cultural factors that may contribute to poor mental health. This could be done in a number of ways – anti-bullying campaigns in schools, providing cheap or free crèches so that young single mothers can access recreational facilities or have a break from child care, ensuring economic security for people in old age – that on the surface have little to do with mental health, but may actually have a significant impact on it.

So, if you had carte blanche, how would you change the society in which we live to maximize the mental health of the general population?

Systemic models

A more enclosed system that impacts on mental health is the family. Family system theorists consider the individuals within a family to form an interacting system. Each has a reciprocal influence on those around them. The behaviour of individuals within these systems, and the communication between them, can lead to individual members behaving in ways that seem ‘abnormal’. Perhaps the most extreme form of family dysfunction occurs when a member of a family sexually abuses a child within it. Levels of sexual abuse are very high among women who seek psychological therapy for conditions as varied as depression, anxiety and anorexia (Jaffe et al. 2002).

One of the first models of family interactions in relation to mental health focused on people with schizophrenia. Brown and colleagues (e.g. Brown et al. 1972) were the first to identify a family characteristic, now termed high negative expressed emotion (NEE), in which individuals who were prone to episodes of schizophrenia fared particularly badly. Individuals in families who were particularly critical, hostile or overinvolved had a higher rate of relapse than those who did not experience this environment. Reducing levels of NEE resulted in a dramatic reduction in relapse rates. A second, more complex, family system is thought by family therapists to contribute to the development of anorexia in young women (Minuchin 1974). These and other family models of pathology are considered in more detail in Chapter 4 and other chapters in Part II of the book.
Biopsychosocial models

Evidence reviewed so far in this chapter has shown that living in a stressful environment, however defined, does not inevitably lead to mental health disorders, nor does carrying the gene for a particular disorder. Both sets of factors place an individual at increased risk for the disorder. Whether or not this potential is realized is the result of an interaction between these, and other, factors. An individual who has some genetic risk for depression, for example, is more likely to develop the disorder if they live in a stressful environment than if they never encounter such conditions. Someone without genetic risk for the disorder is less likely to become depressed, but they are not invulnerable. If they encounter certain environmental conditions or adverse life-events, they may still become depressed. The same factors may work by protecting an individual against risk of mental health problems. Some genes may protect against disorders. Similarly, some social environments may help an individual to develop resilience and to cope effectively with stress.

For most mental health problems, vulnerability to, or resilience against, mental health disorders is determined by a number of factors, some of which include

- **biological factors:** genetic make-up, viral infections, injuries
- **psychological factors:** childhood trauma, maladaptive cognitive responses to environmental events
- **social/environmental factors:** socio-economic stress, the quality of personal relationships, the availability and quality of social support.

It is noteworthy that the boundaries between each of these dimensions of risk is somewhat fuzzy, and even this simple categorization fails to take account of the interaction between them. People in the lower socio-economic groups, for example, may be more prone to viral infections or injury. People with more or less adaptive coping styles, as a result of previous family experiences, may respond to potentially stressful events in differing ways. Nevertheless, they indicate the key risk dimensions involved in the aetiology of mental health problems.

Diathesis-stress model

The risk factors have been placed into a simple biopsychosocial model known as the diathesis-stress model. In it, diathesis refers to the biological vulnerability an individual carries: stress involves any event or condition that interacts with this vulnerability to influence risk for the expression of the disorder. The lower the individual’s biological vulnerability for a particular disorder, the greater the stress needed to trigger that disorder: the higher their biological vulnerability, the less stress is needed. The nature of both the biological vulnerability and the type of stress that triggers the problems is likely to differ across disorders. In the chapters in Part II of the book, each of the various factors that contribute separately to risk of mental health problems is identified and discussed. Note that in most cases, these risk factors can be combined into this diathesis-stress/biopsychosocial model, even when this is not explicitly stated in the chapter.
Some commentators (e.g. Johnstone 2000) have argued that while the diathesis-stress model acknowledges the role of stress in the aetiology of mental health problems, it still adopts an essentially medical model of mental disorders, as it suggests that stress acts as a trigger to provoke an underlying biologically determined disease process. In other words, the role of stress is relatively minor, and the role of biological factors remains primary. It does not accept that mental health problems can result from the experience of stress or negative events alone, without there being a biological propensity to respond to stress in a way that leads to mental health problems. As such, it maintains the medicalization of what is an essentially psychological phenomenon. Despite these reservations, the diathesis-stress model remains the pre-eminent overarching model of the development of mental health problems.

Chapter summary

1 Defining ‘abnormality’ in relation to mental health disorders usually involves distorted cognitive processes, distress or dysfunction, and an unusual response to particular circumstances. It may also involve the individual being a danger to themselves, but this is relatively infrequent.

2 Diagnosis of mental health conditions, such as those within DSM and ICD classifications, largely follows the biological or disease/medical model of mental health established by Kraepelin in the late nineteenth century.

3 According to this model, accurate diagnosis is important to ensure consistent treatment and research in relation to mental health disorders.

4 Diagnosis is typically based on the presence of a number of symptoms, including hallucinations, poor sleep, low mood, and so on. This categorical approach leads to a dichotomous diagnosis process in which the individual either has or does not have a disorder.

5 Dimensional approaches state that the experiences of individuals with mental health disorders differ in degree from those of the ‘normal’ population but are not categorically different.

6 Psychotherapists generally find diagnostic labels to be unhelpful. Instead, they focus on the nature of the factors that contribute to and maintain the individual’s problems. These become the focus of therapy.

7 A number of factors may contribute to the development of mental health disorders: genetic and biological factors, socio-cultural and family factors, and individual psychological factors. No one approach is able to explain the development of any one disorder, and most result from a combination of factors: the biopsychosocial approach.

For discussion

1 Should we limit the types of people with mental health disorders who are treated in the community? Should people such as psychopaths or so-called ‘predatory’ paedophiles thought to be at risk of reoffending be permitted to live or be treated outside hospital or prison?
2 What would you think if told an individual is ‘schizophrenic’? How might this alter your interpretation of their behaviour or your responses to them?

3 Some severe psychiatric conditions such as Huntington’s disease in which the individual develops increasing muscular spasticity and mental deterioration leading to death in middle age can be predicted by genetic testing. It cannot be prevented, but those who have the gene for the condition may choose not to have children and pass the gene on to them. Would you want to know as a young person whether you carry the gene?

4 If offered the choice of medication or psychological therapy for a mental health problem, which would you choose – and why?

Further reading