

# Psychopathology

# 4

## Key Terms

biopsychosocial approach  
concordance rate  
diathesis-stress model  
expressed emotion  
maladaptiveness  
mental illness approach  
negative symptoms

obsessive-compulsive disorder  
personality disorder  
positive symptoms  
psychopathology  
psychotic symptoms  
social norm  
statistical deviance

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## 4.1 INTRODUCTION

This chapter is concerned with **psychopathology** or the study of abnormal behavior. Before we start, it is important to notice that

**psychopathology** (also called **abnormal psychology**) studies the causes, treatment, and consequences of psychological disorders or mental illnesses such as depression, anxiety, and psychoses

this is a major area of psychology, with links to wider clinical practices such as psychiatry, psychiatric nursing, social work, and the medical sciences in general. Thus even a summary of psychopathology would exceed the scope of this book.

However, the contribution of psychopathology to our understanding of individual differences cannot be neglected.

Differential psychology attempts to explain differences between individuals, and such differences can often be explained in terms of mental illness or psychological disorders. Although this may suggest an overlap between personality and psychopathology, there is a distinction between the two. Whereas personality refers to individual differences in general or normal behavior, psychopathology focuses exclusively on abnormality (see Figure 4.1). In the past decade there has been increased interest in the relationship between personality and psychopathology as conceptualized in terms of a continuum between normality and abnormality.

I present the topic of psychopathology in this chapter by beginning with a look at definitions of abnormality and the historical development of this discipline. Then I examine the dominant approaches and systems of classification in psychopathology, which are widely used to define, describe, and categorize specific psychological disorders. Next I look at the salient diagnostic categories for the major psychological disorders, with a particular focus on personality disorders. Applied implications and criticisms, as well as links to other individual differences, are discussed at the end of the chapter.

## 4.2 DEFINING ABNORMALITY

It would be impossible to understand the meaning and object of study of psychopathology without first defining abnormality.

Unfortunately, this is one of the most contentious issues in psychology, which makes for a complicated start! But the difficulties of this task are also a sign of the variety of approaches to the study of abnormal behavior. There are several conventional criteria for defining abnormality, such as statistical deviance, social and moral norms, personal distress, and maladaptiveness associated with behavior, as well as the mainstream clinical approach of mental illness diagnosis (Davison & Neale, 1998).

The **statistical deviance** approach conceptualizes abnormality in terms of behaviors that are extreme, rare or unique, as opposed to typical. Looking back at Figure 4.1, we can think of normal behaviors as those that fall within the central range of the bell curve, whilst abnormal behaviors would be found at the two ends or

**statistical deviance** an approach that conceptualizes abnormality in terms of behaviors that are extreme, rare, or unique, as opposed to typical

extremes. One problem, however, is that, even if we had a clear cut-off point to distinguish between frequent and infrequent behaviors (which is not the case anyway), there are many examples of statistical outliers (observations or measurements that are unusually large or small relative to the other values in a dataset) that would rarely be described as “abnormal.” For instance, few people can play the piano like Mozart or football like Diego Maradona, and there are probably even fewer people with Einstein’s ability to discover the hidden laws of physics. We could in fact compile an extensive list of unusual behaviors that would often be considered eccentric, original, or creative, but rarely abnormal. Thus the statistical deviance approach refers to behaviors that are not merely infrequent, but also undesirable or negative, which suggests an implicit moral code.

There is arguably no better way to understand the underlying morals of judging abnormality than by examining the **social norm** approach, which considers the various cultural factors determining the perceived normality of a wide range of human behaviors (Scheff, 1966). For example, in some countries, burping after a meal is seen as socially acceptable and complimentary to the chef, whereas in others it would

**social norm** a rule or guideline, determined by cultural factors, for what kind of behavior is considered appropriate in social contexts, e.g., whether burping after a meal is seen as a compliment or a sign of rudeness

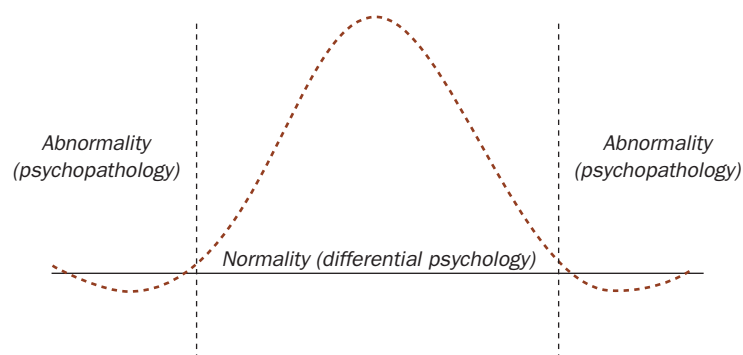


Figure 4.1 Differential psychology and psychopathology.

simply be interpreted as rude or uneducated behavior. Some governments condemn the consumption of alcoholic drinks, whereas others have very relaxed attitudes towards drugs. Some countries strive to promote an equal gender ratio in the workplace, whereas others encourage female circumcision. All these norms are dependent not only on geographical or cross-cultural factors, but also on chronological ones. Thus homosexuality was commonly regarded as abnormal in the past and, bearing in mind the fast advances in biogenetics, it would not be surprising if in a few decades' time sexual intercourse were no longer regarded as normal. People's perceptions of normality, then, are determined by cultural rules, which explains the moral discomfort in people's reactions to behaviors that are culturally condemned or unacceptable.

A more important form of discomfort, and a third criterion for defining abnormality, is the notion of personal *distress*, which takes into consideration individuals' level of suffering and whether they want to get rid of that suffering (Davison & Neale, 1998). Although this approach overcomes the disadvantages of statistical and social criteria, it has other weaknesses, notably the fact that abnormality is not always associated with subjective suffering or the experience of discomfort.

Just as individuals may be diagnosed with cancer, HIV, or diabetes, and nonetheless fail to experience any unpleasant symptoms until the very advanced stages of their illness, anorexic individuals (see section 4.7.4 on eating disorders) may happily starve themselves for several days before experiencing any distress, whereas manic individuals (see section 4.7.2) will experience exaggerated feelings of well-being even in negative circumstances. Everyday behaviors, such as smoking and drinking, may also be considered dangerous from a medical perspective and yet be associated with pleasure rather than pain in the short term. Conversely, it would be inaccurate to regard an individual as abnormal if she is suffering from the loss of a close relative or loved friend, or because she has just been made redundant. That said, the notion of personal distress is important because most forms of physical and psychological illness are at least at some point associated with some subjective discomfort or personal distress, and it is this experience of suffering that often prompts individuals to seek help.

Another reason why individuals may seek help is the **maladaptiveness** of their behavior, that is, the extent to which

**maladaptiveness** the extent to which behavior interferes with a person's capacity to carry out everyday tasks such as studying or relating to others

behavior interferes with their capacity to carry out everyday tasks (notably study, work, and relate to others). In fact, some consider this the most important criterion for defining abnormality (Davison & Neale, 1998). A

common example of maladaptive or disruptive behaviors are those related to anxiety disorders, such as phobias, panic attack, and obsessive-compulsive disorder, all of which *inhibit* the individual in the action and completion of what would normally be regarded as very simple, mundane tasks. Thus fear of driving, flying, or enclosed spaces may stop individuals from working, going on holiday, or studying alone.

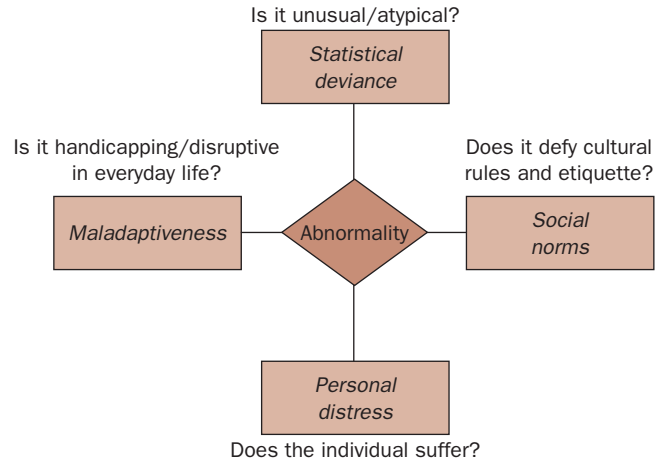


Figure 4.2 Criteria for defining abnormality.

Despite their specific weaknesses, it would be harsh to deny that the above approaches (summarized in Figure 4.2) represent useful criteria for defining the boundaries between normal and abnormal behavior. Indeed, most people tend to rely, albeit intuitively, on these approaches when it comes to interpreting their own and others' behavior. Although it is usually more complicated to diagnose psychological than physical illness, both share an element of statistical deviance, social norms, personal distress, and maladaptiveness. Thus no matter how tempting it may seem from a theoretical perspective to ignore these criteria (by claiming, for instance, that abnormality is simply a socially constructed, and therefore unreal, notion), the practical implications of doing so would be unfortunate. Just imagine a psychiatrist who, faced with a screaming individual who is pressing a knife against his own wrist, simply interprets that behavior as a sign of "individuality."

Although the four approaches described above represent important criteria for defining abnormality, professional practitioners tend to follow a more formal procedure in judging the abnormality of behavior. Thus clinical psychologists and psychiatrists focus on specific *symptoms* that meet the criteria for predefined diagnosis (Davison & Neale, 1998). This approach, known as **mental illness approach**, will be described throughout the rest of this chapter and attempts to integrate physical and psychological variables in order to account for a broad understanding of the processes underlying abnormal behavior. Most of the time, however, it works at a *descriptive* rather than theoretical level. Based on clinical evidence derived from the therapist's observations, interviews, and assessments, and a compiled classification of psychological disorders, it establishes the normality or abnormality of behavior in terms of predefined pathologies (these are described and explained in section 4.6).

**mental illness approach** an approach to psychological disorder that integrates physical and psychological variables in order to understand the processes underlying abnormal behavior

As will be seen, there are few well-established psychophysical mechanisms in understanding mental disorders. Even when there

is agreement on the taxonomy or system of classification that ought to be used, such as the DSM-IV or ICD-10 (explained in section 4.5), these are simply descriptive and have little scope beyond the labeling of symptoms. “Obsessive-compulsive disorder,” for instance, does not refer to a physically based disease but to obsessive and compulsive symptoms. The same can be said about eating disorders and other anxieties: they are self-explanatory but predominantly descriptive. On the other hand, psychological and psychiatric classifications for diagnoses are still influenced by cultural norms and may (fortunately) be subject to change. For example, until 1973, the American Psychological Association (APA) listed homosexuality amongst the most serious psychological disorders (Spitzer, 1981)!

### 4.3 HISTORICAL ROOTS OF PSYCHOPATHOLOGY

The historical roots of psychopathology are relatively well documented. Hippocrates, the Greek philosopher and physician credited with the invention of medicine, believed in the connection between psychological and physical disorders, the former being caused by the latter. As seen in section 2.4, this idea was present in his conceptualization of the major temperament types, though Hippocrates also attempted to explain pathologies such as melancholia, mania, and phrenitis, which were common disorders in ancient Greek society. Accordingly, psychological illness was attributed to a physiological dysfunction.

Conversely, Plato (428–348 BC) argued that disorders should be understood in terms of *intrapsychical* conflicts. Rather than looking for physical causes, Plato was convinced that mental disorders were, to put it simply, “all in the mind.” Both approaches would be further developed by modern theorists and still coexist in contemporary views of psychopathology. Hippocrates’ idea that psychological symptoms have physiological causes is represented by the *somatogenic* approaches to psychopathology, whereas Plato’s interpretation of mental disorders in terms of intrapsychical conflicts is deeply embedded in some of the salient *psychogenic* theories of abnormal psychology. Whilst both approaches focus on different causes, we will see that most psychological disorders can be best understood in terms of both psychological *and* biological determinants.

Although psychopathology did not develop as a major area of psychology until the beginnings of the twentieth century, mental disorders have a longstanding history and have been documented in every continent and form of society, from ancient China (as early as 2674 BC!) to ancient Greece, Rome, the Incan empire, and notably Egypt. In most cases, symptoms were regarded as the expression of supernatural forces that controlled the individual’s mind and body, and mental disorders were treated through obscure rituals such as exorcisms and shamanism – a tribal form of medicine based on magical and spiritual intervention. Ancient Egyptians seemed particularly preoccupied with maintaining a healthy balance in the mind or “soul.” They had special temples for the mentally ill and performed rituals that included the use of opium to reduce pain. Archeological discoveries of prehistoric perforated skulls suggest that ancient societies already imple-

mented psychophysical treatments on mentally ill individuals, in many cases successfully.

Until modern times, however, behavioral abnormalities were mostly treated with violence and mentally ill individuals were typically marginalized rather than looked after. This was particularly common in the Middle Ages, where “loss of reason” was believed to be caused by witches or demons. Thus in 1484 the Pope ordered “possessed” individuals to be burned alive (Nolen-Hoeksema, 2001).

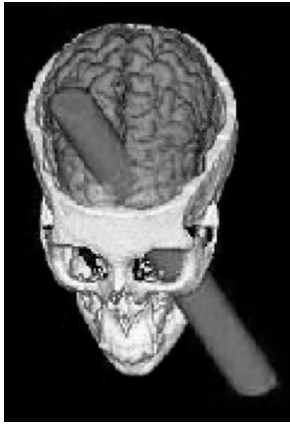
An early exception to this reactive and aggressive approach to mental disorders was the small English housing facility of St. Mary of Bethlehem. Known as *Bedlam* and established in 1243, it is widely regarded as the first formal attempt at psychopathological hospitalization. However, and in spite of remaining open until the early 1800s, treatment was virtually nonexistent at Bedlam, making it more of a tourist attraction than a psychiatric institution.

The first attempt to treat and help the mentally ill dates back to the 1700s, when Philippe Pinel (1745–1826), anticipating the spirit of the French Revolution, proposed the *moral treatment* of those affected by mental disorders. Pinel’s methods introduced friendlier policies for hospitalized patients, such as eliminating chains, preventing physical abuse, improving living conditions, and even offering advice or moral guidance (for a different account, see section 4.8). Another major contribution by Pinel was his attempt to categorize symptoms, which led to the broad differentiation between melancholia, mania, dementia, and idiocy (diagnostic categories are discussed in section 4.7). Inspired by Pinel, William Tuke founded the York Retreat in 1796. Despite the unsurprisingly limited efficacy of moral treatment for the cure of serious mental disorders, this deliberate attempt to help mentally ill individuals inspired the creation of several English and American institutions in order to both understand and treat mental disorders.

### 4.4 MODERN APPROACHES TO PSYCHOPATHOLOGY

Modern approaches to psychopathology tend to posit that mental illness has a physical origin and are thus consistent with early somatogenic theories, such as that of Hippocrates/Galen (see sections 2.4 and 4.3). One of the first representative figures of the modern somatogenic paradigm was Wilhelm Griesinger (1817–68), a German psychiatrist who argued that brain pathology was the cause of all mental disorders. Around the same time, Emil Kraepelin (1856–1926) and Eugen Bleuler (1898–1927) developed similar theories, no doubt due to the rapid developments in anatomy, physiology, neurology, and chemistry that were then taking place. Kraepelin’s main contribution was the first modern classification of symptoms, labeling and describing different psychological disorders. An important distinction was made between manic depressive disorders and dementia praecox, later referred to as schizophrenia (see section 4.7.1).

One particularly clear and famous example of how structural changes in the brain may impair normal psychological functioning is the Phineas Gage case. Gage was a 25-year-old railworker who suffered a spectacular injury when an iron bar penetrated his



**Figure 4.3** Phineas Gage's brain injury.

Source: [www.ninds.nih.gov/health\\_and\\_medical/pubs/tbi.htm](http://www.ninds.nih.gov/health_and_medical/pubs/tbi.htm).

head (see Figure 4.3). Although Gage was lucky enough to survive the accident, he showed radical transformations in behavior after suffering the injury. Having been responsible, agreeable, ambitious, and hardworking all his life, after the injury he became irreverent and capricious, showing no respect towards social norms or other individuals. Surprisingly, and despite his losing every form of emotional and social control over his behaviors, Gage's intellectual skills remained intact (Damasio et al., 1994).

On the other hand, the Austrian physician Franz Anton Mesmer (1734–1815), in the tradition of Plato and the psychogenic paradigm (see section 4.3), believed psychological disorders to be the expression of psychical rather than physical factors. Mesmer's initial and no doubt obscure theory assumed mental illness to be caused by "magnetic fluids," a sort of astrological energy force inside people's bodies. Furthermore, Mesmer believed himself to be in possession of a healing touch that could positively influence ill individuals and cure them! He also developed a hypnotic method called *mesmerism* (which gave birth to the expression *mesmerized*) that he applied on patients, sometimes in sessions lasting for several hours.

Jean Martin Charcot (1825–93), a prestigious French neurologist who was initially skeptical of Mesmer's theory and believed that psychological disorders were caused by a degeneration of the brain, nonetheless experimented with mesmerism and found that patients experienced substantial relief after being able to talk about their symptoms under hypnosis. This process was called *catharsis*, alluding to the ancient Greek idea of tragic theater as a method of coexperiencing negative emotions with the actors, and would have a major influence on one of Charcot's students, Sigmund Freud (1856–1939).

#### 4.4.1 Psychoanalysis and psychodynamic theories

Freud's studies of the so-called hysterical disorder, a bizarre illness that caused mostly well-off Victorian women to lose the

functioning of or feeling in specific parts of the body, led him to conclude that there was an *unconscious* intrapsychical origin to mental illness. Evidence for this claim was derived from the fact that, under hypnosis – when patients are not conscious – hysterical symptoms could be induced.

Subsequent clinical observations led Freud to the theoretical development of psychoanalysis, a therapeutic method and theory based on the exploration of the unconscious. Psychoanalytic theories are often referred to as psychodynamic, for they deal with the processes underlying dynamic conflicts between unconscious and conscious psychological forces. Although psychodynamic theories developed in the context of abnormal behavior and mental disorders, they posit that *all* behaviors (normal and abnormal) are influenced by unconscious processes. Thus psychoanalysis has been used to understand human behavior in general and applied to a wide range of areas such as philosophy, literature, and sociology, making Freud the most famous psychologist of all times (Haggblom et al., 2002). Although even a summary of Freud's theory would exceed the space available for this book (he wrote more than 25 books and there are many more by other authors attempting to explain or reinterpret his theory), it is certainly important to summarize some of the basic ideas of the psychoanalytic approach to psychopathology.

Freud understood psychopathological symptoms as a compromise between unconscious and conscious forces that represents a symbolic expression of traumatic or repressed events. According to Freud, the sexual and aggressive drives are the two universal forces underlying human behavior. If social and cultural constraints did not exist, our instinctive reaction would be to release both our sexual and aggressive tensions in order to minimize pain and maximize pleasure. Freud called this "operating by the pleasure principle" or "primary process thinking." However, because every form of society is based on some form of prohibition, we are obliged to trade off immediate pleasures for long-term rewards and conform to the "principle of reality."

Drives not released through actual behavior are directed onto various symbolic formations that allow part of them to be expressed whilst conforming to the principle of reality. Examples of these formations are fantasies, dreams, and, as anticipated, psychological symptoms. In order to untangle the etiology of symptoms and psychological disorders, it is necessary to account for the unique and complex history of every individual. More importantly, there can only be hope of overcoming mental illness if the patient can elaborate on his/her own unconscious wishes – usually repressed childhood fantasies – to overcome the psychological conflict.

One possibility is to *transfer* unconscious desires onto the therapist, "pretending," say, he/she is our father or mother, to allow unconscious desires (of hate or love) to be expressed in behavior rather than symptoms. This, however, is a long and tedious process which would prove ineffective with most serious, biologically based mental illnesses. Some treatments may last for 10 or 20 years, at a rate of more than one meeting per week! Besides, Freud's theory is based on few case studies and is largely untestable. Most claims are based on circular interpretations and speculative theories rather than robust and representative empirical evidence.

#### 4.4.2 Behaviorism

In the first half of the twentieth century, while psychoanalysis was gaining momentum in Europe, a very different psychological explanation for mental disorders developed within the behaviorist movement. Unlike psychoanalysis, behaviorism was concerned with the study of empirically observable behavior and uninterested in hypothetical psychodynamic conflicts. Furthermore, behaviorism in its purest and more radical form denied the existence of any internal mental processes and explained human behavior, including psychological disorders, in terms of *conditioning*. Accordingly, symptoms would merely be a consequence of reinforcing or punishing specific behaviors, and psychology would cease to be the science of the mind to become the science of behavior.

The roots of behaviorism are deeply experimental and attempted to replicate the robust research methodology of the hard sciences (e.g., biology, physics, and chemistry). Lightner Witmer (1867–1956) imported to the United States the techniques he learned in Germany from Wilhelm Wundt (1832–1920), one of the fathers of experimental psychology. Witmer inaugurated the first “experimental clinic” in the University of Pennsylvania, dedicated to the study of mental deficiencies in children. Meanwhile, Ivan Pavlov (1849–1936) in Russia and John Watson (1878–1958) in America applied the principles of classic conditioning to the study of phobias.

In what is arguably one of the most representative quotes of the radical behaviorist spirit of the early twentieth century, Watson (1930, p. 104) famously claimed: “Give me a dozen healthy infants, well-formed, and my own specified work to bring them up in, and I’ll guarantee to take any one at random and train him to be any specialist I might select – doctor, lawyer, artist, merchant-chief, and yes, even beggar-man and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and the race of his ancestors.”

A variation of classical behaviorism was later introduced by Thorndike (1874–1949) and Skinner (1904–90), who noticed that rewarding desirable behaviors was more effective than punishing undesirable ones. This effect/method was referred to as *operant conditioning*. Despite the controversial ethical implications associated with behaviorism, it has shown to be effective with regard to the treatment of anxiety disorders and phobias, and is still used widely today. Theoretically, however, behaviorism represents a reductionist explanation of behavior as it fails to account for a variety of mental processes, which, albeit hypothetical, are useful to understand psychopathology and develop effective treatments for psychological disorders.

#### 4.4.3 Cognitive revolution

With the decay of behaviorism, a new wave of research emerged in the 1960s and 1970s that attempted to understand the internal mental processes so emphatically ignored and denied by behaviorists. These processes or *cognitions* were at the center of the cognitive revolution in psychology and represent another important contribution to our understanding of mental illness.

One of the major legacies of cognitive theory to psychopathology is the idea that people’s subjective interpretations of events can have a direct impact on their behavior and emotion. Bandura (1986), a leading figure of the cognitive movement, conceptualized this idea in terms of *self-efficacy* or individuals’ belief about the extent to which they can successfully execute the appropriate behaviors to control and influence important life events. According to Bandura, self-efficacy has a substantial positive influence on people’s well-being.

The contribution of the cognitive approach to psychopathology has been not only theoretical but also clinical. A good example is Ellis’s (1973) *rational emotive therapy*, which conceptualizes illness as the result of irrational negative beliefs about oneself and the world. These beliefs tend to be absolute, unrealistic, and self-defeating, even when they stem from apparently positive assumptions such as “everybody must love me all the time.” The disparity between unrealistic ideals that are out of reach and the perceived reality is, according to Ellis, the main cause of mental illness. The role of the therapist is therefore to enable changes in the patient’s beliefs, introducing a more realistic outlook on the world. This is often achieved through overt confrontation between the therapist and the client (Dryden & DiGiuseppe, 1990).

#### 4.4.4 Biological approaches

Technological advances in the past 50 years have caused an unprecedented increase in research into the *biological* causes of psychopathology. Broadly speaking, biological approaches can be divided into neuroanatomy or those dealing with the *structure* of the brain, and neurophysiology or those dealing with the *processes* or *functions* of the brain. In combination, neuroanatomy and neurophysiology represent the multidisciplinary field of neuroscience, which is rapidly developing in and outside psychopathology.

The most common biological studies in psychopathology investigate the biochemical correlates of mental illness, notably the role of *neurotransmitters*, which are chemical messengers that carry information between neurons and other cells. Imbalances in several of the at least 100 types of neurotransmitters are known to be associated with psychological disorders. For example, *serotonin* affects emotion and impulse regulation, such as levels of aggression, whereas *gamma-aminobutyric acid* (GABA) is a major inhibitor of behavior. Most notably, *dopamine* levels have been strongly linked to psychosis and schizophrenia, mainly since the effective introduction of the so-called phenothiazines drugs, which reduce psychotic symptoms through blocking dopamine receptors, and the identification of the increase of dopamine levels by amphetamines and cocaine (Valenstein, 1998).

Studies on the biological causes of psychopathology have also examined the potential role of the endocrine system, which is responsible for the production and release of *hormones* in the blood. Hormones are known to affect mood, levels of energy, and reactions to stress, all of which constitute important aspects of psychopathology. For instance, the *adrenocorticotrophic hormone* (ACTH) plays a substantial role in determining levels of stress, triggering the release of another 30 hormones.

In spite of technological advances in brain-measuring equipment, most biochemical variables can only be measured indirectly in living humans.

## 4.5 INTEGRATIVE APPROACHES TO PSYCHOPATHOLOGY: THE BIOPSYCHOSOCIAL MODEL

Although some (particularly psychiatrists) believe the evolution of psychopathology is largely a function of replacing psychogenic approaches with somatogenic, much of the improvements in

**biopsychosocial approach** a multidisciplinary approach to psychopathology based on the idea that mental illness results from a combination of biological, psychological, environmental, and social factors

**diathesis-stress model** this model suggests that some people possess an enduring, inherited vulnerability (diathesis) which is likely to result in psychological disorder (e.g., schizophrenia) when they experience an unbearable life event (stressor)

psychopathology in recent years have depended on the *integration* of the different approaches discussed above, though there are also other approaches such as humanistic and sociocultural theories of abnormal behavior. This multidisciplinary perspective is often referred to as the **biopsychosocial approach** to psychopathology, and its major exponent is the **diathesis-stress model**.

According to the diathesis-stress model (Cicchetti & Rogosch, 1996; Monroe & Simmons, 1991; Williams,

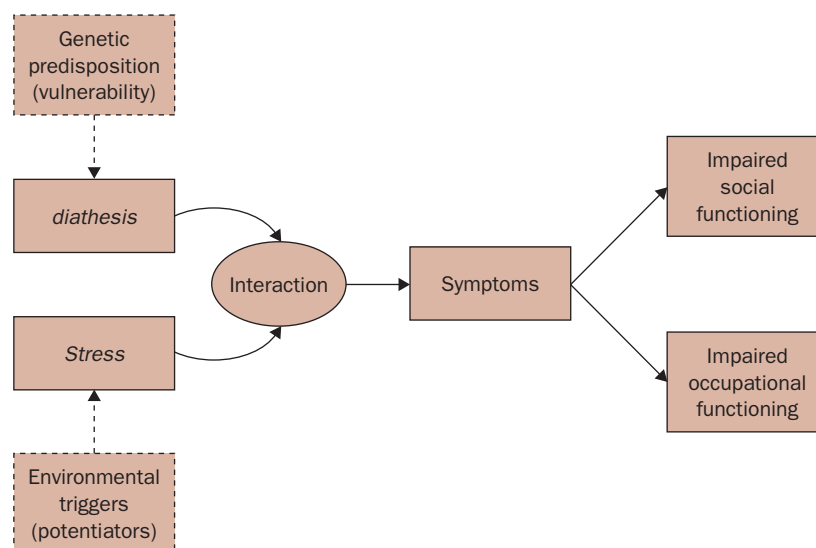
1985), psychopathological symptoms and diseases are caused by a combination of biological, psychological, and social factors. In simple terms, this model explains mental illness as a byproduct of inherited vulnerabilities (diatheses) and unbearable life experiences (stress) (see Figure 4.4). An individual's level of vulnerability or

predisposition is biological and can be explained in terms of pathological brain structures or processes at the level of genes, neurotransmitters, and hormones. The life events or stressors that trigger that disposition, however, are environmental. For example, conflictive relationships with friends or other family members may cause dispositional factors to be manifested in the form of mental illnesses such as schizophrenia (see Meehl, 1962, and section 4.7.1). Thus vulnerability is necessary but not sufficient in itself to cause the mental illness, and so is the stressor.

The diathesis-stress model also explains physical illnesses such as hypertension, diabetes, or hyperlipidemia. For example, genetic factors alone may not lead to heart attack if there is sufficient exercise, balanced nutrition, and no smoking or alcohol abuse. Likewise, an unhealthy lifestyle may still lead to serious physical illness even if there is no history of previous illness in the family.

## 4.6 DIAGNOSIS: CLASSIFYING PSYCHOLOGICAL DISORDERS

Aside from the various theoretical approaches discussed above, there are two main frameworks for classifying psychological disorders, namely, idiographic and nomothetic. The *idiographic* framework, which is widely adopted by psychoanalytic and psychodynamic theories (see section 4.4.1), emphasizes the singularity of mental illness and assumes psychological disorders to be manifested differently in every individual. Accordingly, it treats each case completely separately and establishes no comparisons with predefined norms or diagnostic classifications. Conversely, the *nomothetic* framework is based on preestablished categories and compares every case with previously defined, described, and classified psychological disorders. This framework, which will be the focus of the present chapter, represents the mainstream approach in psychopathology and is often referred to as the psychiatric model. As you may note, the distinction between idiographic and nomothetic frameworks in psychopathology is



**Figure 4.4** Diathesis-stress model: an integrative approach to psychopathology.

**Table 4.1** DSM-IV, Axis 1 (major types of disorders)

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<b>Infancy/childhood/adolescence disorders:</b> e.g., learning and development disorders, attention deficit, hyperactivity, and autism.
<b>Late adulthood disorders:</b> serious and often irreversible impairments of cognition and mental functioning, e.g., delirium, dementia, amnesia.
<b>Substance-related disorders:</b> disorders that involve ingestion of drugs that bring change to mental functioning.
<b>Detachment from reality:</b> disorders that involve hallucinations, delusions, and thinking impairment, either intermittently or indefinitely (e.g., schizophrenia and other psychoses).
<b>Affective disorders:</b> disorders based on severe alterations of mood/affect (e.g., depression, mania, bipolar disorder).
<b>Anxiety disorders:</b> disorders characterized by anxiety and exacerbated worry (e.g., phobias, obsessive-compulsive disorder, post-traumatic disorder).
<b>Somatiform or dissociative disorders:</b> disorders characterized by physical symptoms that do not correspond to physical illness, i.e., have no apparent physical cause.
<b>Sexual/gender disorders:</b> deviations from normative sexual practices (e.g., paraphilias, fetishism, pedophilia, and sadomasochism).
<b>Eating and sleeping disorders:</b> e.g., anorexia nervosa, bulimia nervosa, insomnia, narcolepsy, and apnea.
<b>Factitious disorder:</b> a rare case whereby individuals self-induce physical or psychological symptoms to attract people's attention.
<b>Adjustment disorder:</b> emotional or behavioral disorders that follow stressful life events and do not fit into any other category.
<b>Impulse control disorder:</b> disorders characterized by impulsive behaviors that are out of control, e.g., kleptomania (compulsive stealing), pyromania (compulsive burning), and gambling (in its pathological form).

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comparable to the distinction between situational and dispositional conceptualizations of personality (see sections 2.2 and 2.5).

The two dominant taxonomies for diagnosing mental disorders are the *International Classification of Diseases, Injuries, and Causes of Death* (ICD) and the *Diagnostic and Statistical Manual of Mental Disorders* (DSM). The ICD, the latest version of which is ICD-10 (World Health Organization, 1992), covers both mental and physical disorders and is more widely used in Europe. The DSM, the latest revision of which is DSM-IV (American Psychiatric Association, 1994), represents the state-of-the-art classification system in the US and refers exclusively to mental disorders, though it is largely based on the ICD. Both systems have converged considerably in the past decades and there is large overlap between them today. Thus I shall focus only on DSM-IV.

Diagnostics are based on:

- a) some *core* symptoms that need to be present;
- b) prespecified periods of *time* for symptoms to be present; and sometimes
- c) symptoms that should *not* be present.

The DSM follows a *multi-axial format* comprising five different axes, though axes 1 and 2 alone may determine the diagnostic. *Axis 1* (shown in Table 4.1) describes the major types of disorders, for example, affective disorders and anxiety disorders. *Axis 2* includes lifelong conditions such as mental handicap and personality disorders (e.g., paranoia, schizoid, antisocial behavior, narcissism) (see section 4.9) that lead to enduring maladaptive behavior. *Axis 3* refers to the medical or biological causes of mental dysfunctions. *Axis 5* focuses on daily adaptive functioning, that is, the extent to which illness interferes with everyday life.

Two major aspects to assess the usefulness of the DSM and ICD are *reliability* and *validity*. Reliability refers to the extent to which there is agreement about the diagnosis. Just as a reliable scale will signal the same weight for the same object every time

it is weighed, different observers using the same criteria should arrive at the same diagnostic for the same individual, and different targets exhibiting similar symptoms should be diagnosed with the same illness. Although both DSM-IV and ICD-10 have shown improved reliability with regard to earlier versions, especially for schizophrenia, mood, and anxiety disorders (Sartorius, Ustun, Costa e Silva, Goldberg, & Lecrubier, 1993), the system is far from ideal and inter-agreement correlations are typically modest to moderate, but rarely high.

*Validity*, on the other hand, refers to the question of whether the system of classification can effectively distinguish one diagnosis from another. Thus two individuals with different symptoms should be diagnosed with different illnesses, just as two individuals who differ in weight should be given different weights. There are different types of validity. *Etiological validity* is based on the causes of the diseases: the same or similar causes should be identified for the same diagnoses. *Concurrent validity* refers to the idea that the same disorders should be expressed in terms of the same secondary symptoms. For instance, most schizophrenics suffer from memory impairment, though this is not a central symptom of schizophrenia (Stirling, Hellewell, & Hewitt, 1997). *Predictive validity* refers to the extent to which we can accurately anticipate the outcome and course of a disorder, as well as individuals' response to treatment. For instance, people suffering from bipolar disorders will typically respond well to lithium drug treatments. Again, the validity of diagnostic categories is far from perfect and has often been the focus of harsh criticism (see, e.g., section 4.8).

## 4.7 MAJOR PSYCHOLOGICAL DISORDERS

Major psychological disorders are at least as likely to occur and be reported as are medical illnesses such as heart diseases and cancer. According to the National Alliance for the Mentally Ill, more than



20 percent of US adults will experience some kind of mental illness every year, and half of those will also experience maladaptive symptoms. Some of the most common groups of mental illness, which are briefly examined below, are schizophrenia, affective disorders, anxiety disorders, and eating disorders, though the overall lists of disorders today includes 374, up from only a dozen at the beginning of the last century and 192 in the early 1950s.

### 4.7.1 Schizophrenia

At the turn of the 20th century, a form of madness that came to be called schizophrenia was described and distinguished from mood disorders like mania and melancholia. [It] was observed in young people and persisted for years, working its way deeply and intimately into mind and behavior. People with the illness might hear the roars of Satan or the whispers of children. They might move armies with their thoughts and receive instructions from other worlds. They might feel penetrated by scheming parasites, stalked by enemies, or praised by guardian angels. People with schizophrenia might also speak nonsensically, their language at once intricate and impenetrable. And many would push, or be pushed, to the edge of the social landscape, overcome by solitude.

(Heinrichs, 2005, p. 229)

Schizophrenia is one of the most severe and debilitating forms of mental illness. It is a psychotic disorder characterized by the patient's lack of insight and loss of contact with reality. It is *episodic*, which means that normal and abnormal functioning interact. In the worst form of the illness, schizophrenic individuals are completely unable to distinguish between inner (mental) and external reality, suffering from severe thinking and perception impairment. Some of the salient syndromes or groups of symptoms of schizophrenia are:

- a) *Hallucinations* or fake perceptions, most commonly noises/voices, though other senses can be involved, too.
- b) *Delusions* or false beliefs, e.g., of persecution or power; they can often be part of complex conspiracy theories.
- c) *Disorganized speech*: speaking incoherently or abstractly.
- d) *Disorganized behavior*: acts that deviate from normative cultural parameters, such as dressing strangely, crying or laughing for no apparent reasons, and so on.
- e) **Negative symptoms**: reduced or inappropriate emotional responses, lack of affect, reduced motivation and speech.
- f) *Passivity*: the experience that an external "evil" force is in control of the individual's thoughts and behavior (Liddle, 1987).
- g) *Neurocognitive deficits*: impairments in memory, attention, executive function, and social cognition (Heinrichs, 2005).

**negative symptoms** in schizophrenia, symptoms that indicate the absence of something normal, e.g., reduced or inappropriate emotional responses, lack of affect, or reduced motivation

Most patients will usually experience more than one of the above listed syndromes throughout the course of illness. If two or more syndromes are present for at least one month, individuals will meet diagnostic criteria for schizophrenia, though the presence of auditory hallucinations (i.e., hearing voices) alone may be considered sufficient to diagnose schizophrenia. As emphasized by the maladaptive conception of abnormality (see section 4.2), symptoms should also impair normal functioning in areas such as work or interpersonal relations. Besides the one month rule for central syndromes, some kind of disturbance ought to persist for at least six months before a reliable diagnosis is made.

Schizophrenia was originally conceptualized by Kraepelin as *dementia praecox* or "early madness" because its symptoms appeared much earlier than in other mental illnesses. When Bleuler renamed the disorder "schizophrenia" (literally, "split mind"), he attempted to emphasize the dysfunctional nature of associative thinking and other basic cognitive functions such as attention, memory, and judgment. Despite popular belief and the etymology of the term, however, schizophrenia does not involve a split or double personality. It is also uncharacteristic of schizophrenic individuals to behave in an aggressive manner, though aggression may sometimes be a consequence of their reaction to intolerable symptoms, e.g., responses to paranoid hallucinations and delusions.

Historically, different types of schizophrenia have been identified, notably *catatonic*, *hebephrenic*, and *paranoid*. More recent classifications, such as the DSM-IV, have included two further types, namely, *residual* and *undifferentiated*. Catatonic schizophrenia is characterized by kinetic abnormalities, such as abrupt or odd body movement. Disorganized schizophrenia (also known as hebephrenic) is manifested in terms of both thought disorder and decreased affect. Paranoid schizophrenia consists of vivid and horrifying hallucinations but rarely manifests itself in terms of thought disorder or disorganized behavior. Residual schizophrenia is typified in terms of **positive symptoms** (e.g., delusions, hallucinations, and thought disorder) that are only present at a low intensity. Finally, undifferentiated schizophrenia comprises none of the above psychotic symptoms, that is, symptoms which are not representative of any other type of schizophrenia.

**positive symptoms** in schizophrenia, symptoms that indicate the presence of something unusual, e.g., delusions, hallucinations, and thought disorder

Schizophrenia is rarely manifested before late adolescence. It may start with frequent states of low mood, high anxiety, and abrupt changes of affect, then gradually develops to hallucinations. The initial or *acute* phase of the illness is often characterized by positive symptoms, whereas the more advanced or *chronic* phase, which may take place several years later, shows reductions in activity, motivation, and emotional response as well as increasing hallucinations. The positive symptoms that characterize the acute phase make it difficult to diagnose schizophrenia before the disorder has advanced and developed to its chronic phase.

In statistical terms, schizophrenia is a rare disease. Traditionally, estimates suggested that about 1 person in 100 will suffer from schizophrenia at some stage of their lives, though recent estimates are more conservative and report the number of

cases to be in the region of 2 to 4 per 1,000. This may seem like a low percentage rate, but if you multiply it by the overall population of a city or a country the number of affected patients will be substantial. There is generally little cross-cultural variability in the number of schizophrenic cases reported, a fact that has often been used to emphasize the biological basis of this disorder. Of those suffering from schizophrenia, 20 percent will typically experience only one acute episode, with about 30 percent experiencing more than one. In both cases, full or partial recovery will be the most frequent outcome, with only 10 percent of cases being permanently impaired after several incidents.

There are many factors that may help recovery, such as being married, having a good educational background, or having a good past employment record (Shepherd, Watt, Falloon, & Smeeton, 1989). In addition, females tend to recover better and more frequently than males. It is also noteworthy that a progressive and early start of the illness is more likely to be associated with a slower and more difficult recovery, especially if there are no identifiable external stressors to which the disorder can be attributed. In all cases, symptoms need to be treated as soon as possible.

Schizophrenic patients are usually treated with *antipsychotic/neuroleptic* drugs, acting mostly on the dopamine and, to a lesser extent, serotonin and histamine neurotransmitters. These chemical messengers affect levels of mood and emotionality and are overactive in schizophrenics (Seeman, 1980; Snyder, 1976). However, causal links at the neuropsychological level are yet to be investigated. Cognitive therapy, if combined with antipsychotic drugs, can help to reduce hallucination and delusions, especially in the first stages of illness, and has long-term beneficial effects (Crow, MacMillan, Johnson, & Johnstone, 1986; Kuipers, Fowler, Garety, Dunn, Bebbington, & Hadley, 1998).

Little is known about the cause of schizophrenia. Somatogenic approaches focus on the role of brain structure and genes. Although these effects cannot be directly observed, family, adoption, and twin studies provide indirect evidence for the biological etiology of schizophrenia. It is estimated that there is a 10 percent risk of developing the disorder amongst first-degree relatives, 3 percent amongst second-degree relatives, and 2 percent amongst third-degree relatives (Slater & Cowie, 1971; Kendler & Diehl, 1993). Adoption studies suggest that the risk of developing schizophrenia is virtually the same if individuals have been adopted away than if they were raised by their natural parents (Heston, 1966; Rosenthal, 1971). Most impressively, twin data indicate that the **concordance rate** for monozygotic (MZ) or

**concordance rate** the extent to which people show the same disorders

identical twins, who have 100 percent of genes in common, is 38 percent higher than for dizygotic (DZ) or non-identical twins, who have 50 percent of genes in common, and first-degree relatives (Gottesman & Shields, 1972). Although this provides convincing evidence for the importance of genetic factors in the etiology of schizophrenia, it does not rule out environmental causes.

Other attempts to identify the biological determinants of schizophrenia have included genetic mapping (Sherrington et al.,

1988), searching for deficient chromosomes, computed tomography (CT), magnetic resonance imaging (MRI), and measuring brain and cerebral ventricles (Raz & Raz, 1990). Cognitive neuroscientists have found that certain brain areas, such as left frontal lobe, may fail to monitor plans and intentions, leading to unawareness and hallucinations (Frith, 1992; Spence, Brooks, Hirsch, Liddle, Meehan, & Grasby, 1997).

On the other hand, psychogenic theories have emphasized the impact of early childhood and family experiences on the development of schizophrenia. Freud (1966/1896) interpreted schizophrenia as the expression of an unconscious conflict between sexual impulses and sociocultural norms. Accordingly, schizophrenic symptoms would be a compromise between these two forces, though mediated by several complex defence mechanisms. As with most psychoanalytical hypotheses, there are not many ways to empirically test this assumption. However, the more general idea that stressful events or environmental demands may trigger schizophrenic symptoms has been accepted more widely (see section 4.5).

Other psychoanalysts suggested that schizophrenia could be caused by chaotic family relations or abnormal parenting styles (Fromm-Reichmann, 1948; Laing, 1971). This view is consistent with the **expressed emotion** perspective, which points out that when families express their negative emotions to the schizophrenic individual, his/her illness will be likely to aggravate (Vaughn & Leff, 1976; Stirling et al., 1993). Hence the importance of *family therapy* for the treatment of people with schizophrenia (Hogarty et al., 1991).

**expressed emotion** refers to the specific set of feelings and behaviors directed at people with schizophrenia by their family members

## 4.7.2 Affective disorders

Another major type of mental illness is represented by the so-called affective disorders, which are characterized by the exaggerated intensity of mood experiences throughout long periods of time. Crucially, such experiences seem either unrelated or disproportionate reactions to external real-life events.

Depression, as the everyday connotation of the word suggests, is characterized by a persistent low mood or *anhedonia*. It causes speech reduction, lack of joy, and pessimistic, often suicidal, feelings of guilt. Perceptual abnormalities and reductions in appetite and sex drive are also frequent. In addition, depression is often associated with lack of concentration and attention, and increased anxiety. Depressive symptoms are classified as *reactive* if they develop as a response, albeit disproportionate, to real-life stressors, or *endogenous* if they have no external cause at all. They are also classified on the basis of their gravity, namely, as neurotic if minor or psychotic if severe, though no clear-cut distinction exists (Paykel, Hollyman, Freeling, & Sedgwick, 1988).

Depression is one of the most common and disabling mental disorders, with approximately 20 percent of reported cases globally, including 6 percent with lifetime risks. It is more frequent in women, poor, and lonely people (Brown & Harris, 1978),

suggesting cultural and social determinants. Depression can last from a mere few weeks up to several years (Angst, 1978), but most treated patients will tend to recover.

The most widely used and effective treatment for depression is antidepressant medication, though in urgent cases quicker methods such as electroconvulsive therapy (ECT) are often applied. ECT is a speedy but controversial technique by which electric activity is induced on the brain. Specifically, it involves the introduction of a tonic seizure where the patient loses consciousness for at least one minute. Contrary to popular belief, long-term negative effects of ECT are rare (Zervas & Fink, 1992), especially when administered under anesthesia and muscle relaxants, as it normally is. Another alternative to psychopharmacological treatment is cognitive therapy (CT), which requires patients to systematically collect information about distorted self-beliefs and restructure them in an adaptive fashion (Beck, Rush, Shaw, & Emery, 1979). It has recently been argued that CT is superior to psychopharmacological treatment because it prevents future relapses (Hollon, Stewart, & Strunk, 2006). The authors claimed that “prior CT has an enduring effect that is at least as large in magnitude as keeping patients on medications” (p. 11.6). However, it is not clear why such an effect would take place. One plausible explanation is that the newly introduced cognitions would persist over the original self-defeating beliefs, thus making the individual less vulnerable to future stressors (Hollon, Shelton, & Loosen, 1991).

Psychoanalytic theories explain depression in terms of lack of maternal affection and symbolic loss (Freud, 1957/1917; Klein, 1935), whilst psychosocial approaches similarly emphasize the etiological aspects of stressful life events (Brown & Harris, 1978), for instance the loss of a partner or family member. According to Seligman (1974), repeated exposure to negative and unpleasant events will lead to a state of *learned helplessness/hopelessness*, which predisposes individuals to negative expectations and feelings. Along these lines, cognitive psychologists have argued that depression may be caused by low self-esteem and *negative attributional style* (Lewinsohn, Roberts, Seeley, Rohde, Gotlib, & Hops, 1994), particularly in adolescence. These biased and self-defeating beliefs can often be changed through CT (Beck, 1983).

The second major type of mood disorder is mania and is represented by the opposite extreme of affect than depression. Thus manic individuals experience exacerbated elevated mood and an inappropriate sense of well-being (e.g., optimism, overconfidence, and overexpression of positive emotions). These states can last for several weeks, though usually in alternation with normal mood states. Other symptoms may include abnormal thought and speech (e.g., rapid, uninterrupted, incoherent, inconsistent) as well as **psychotic symptoms**, notably delusions of grandeur.

**psychotic symptoms** symptoms such as hallucinations, incoherent speech, and delusions that indicate a distorted perception of reality

Manic behavior is characterized by overactivity and increased sexual and aggressive impulses.

About 1 percent of the population is estimated to suffer from mania, though

manic symptoms are more frequent in the context of bipolar mood disorders, where manic and depressive symptoms

alternate. Manic patients are treated with lithium and anti-psychotics and require hospitalization, often against their will, no doubt because of their subjective feeling of well-being. If adequately treated, the most common prognosis for manic patients is recovery within six weeks.

Biological explanations point at *genetic* factors underlying affective disorders. Twin studies indicate that the concordance rate for MZ is very high (68 percent if reared together, 67 percent if reared apart), and much larger than in DZ (23 percent) (Shahuria, 2003). It is possible that genetic factors determine biochemical differences in neurotransmitters, particularly in the so-called *monoamine* group, involved in mood regulation (Sachar & Baron, 1979). In addition, endocrinal factors (hormones) seem particularly relevant with regard to depression, notably the underactivity of the thyroid gland. However, causal links are difficult to demonstrate and it is likely that psychological processes affect physiological states as much as physiological processes affect psychological states.

### 4.7.3 Anxiety disorders and obsessional states

Another main psychopathological category comprises anxiety disorders and obsessional states, both of which are characterized by the experience of high levels of anxiety. As noted elsewhere (chapters 2, 3, and 9), anxiety is a fundamental human emotion and is therefore not exclusive of abnormal disorders. Further, it has long been observed that anxiety has several positive adaptational functions, preparing the individual for action by signaling danger in threatening situations. When chronic, however, it is unrealistic (disproportionate to any threat) and unbearable for the individual.

Anxiety can be experienced both psychologically and somatically (physically). The most common psychological symptoms are unpleasant and dreadful feelings, though in severe cases they may include panic attacks and fear of death. Somatic symptoms include increased heart rate, accelerated breathing rate, muscular tension (e.g., scalp, back, shoulder), and, in general, increased arousal (e.g., inability to relax/settle, fall asleep, concentrate).

One of the most common anxiety disorders is phobias, i.e., the experience of irrational or disproportionate fear of an object or *phobic stimulus* that leads the individual to avoid contact with that object. The object of phobias can be anything from spiders to darkness and social interaction, though usually it is represented by a group of related stimuli (e.g., insects, heights, people). Even when phobic individuals are aware of the irrationality of their fear, they are still unable to establish contact with the phobic event or object, which impairs normal functioning. Women are more commonly affected by phobias than are men, except during childhood when there are no significant gender differences in phobias. Thus, adult phobias are often regarded as a continuation of normative childhood fears. A common treatment for phobias is *systematic desensitization*, which consists of progressive exposure to the phobic object. In recent years this technique has also been combined with computer technology, notably applying

virtual reality experiences that simulate an encounter with the phobic object (useful if you fear crocodiles).

Grouped alongside phobias and anxieties is **obsessive-compulsive disorder** (OCD), which is defined by intense and repetitive obsessional experiences and compulsive acts. These acts are in fact rituals to relieve the individual from anxiety. However, they are often performed against the individual's will, becoming a problem in itself. OCD tends to start in early adulthood, and about 3 percent of the

**obsessive-compulsive disorder** a disorder characterized by intense and repetitive obsessions that generate anxiety, e.g., fear of contamination, and compulsive acts or ritualistic behaviors to reduce anxiety, e.g., hand-washing

population is reported to suffer from it at some point.

There are several theoretical models for explaining the causes of phobias and other anxiety disorders. Psychodynamic theories have tended to follow the Freudian conception of symptoms as symbolic formations representing the conflict between unconscious sexual or aggressive impulses and social/cultural norms (Freud, 1955/1909). Behaviorists, such as Watson and Rayner (1920), believed phobias could be induced in humans as in animals through associationism and conditioning. More recent behaviorist approaches have postulated a *two-process theory*. The first phase would involve conditioning and inducement of fear, whilst a second phase, called operant conditioning, would involve avoidance of contact with the phobic stimulus (Eysenck, 1976). For example, if a child is attacked by a dog (stage 1), she may avoid contact with other – potentially *good* – dogs (stage 2). In turn, this avoidance would somehow perpetuate the child's fear of dogs.

Evolutionary explanations, on the other hand, have emphasized the fact that not just any object will be easily associated with fear and phobias. Rather, phobic stimuli possess a certain element of real threat, which explains why insects, snakes, heights, and dentists are common objects of phobias. In that sense, there would be a certain element of *preparedness* and adaptation underlying the causes and manifestations of phobias (Seligman, 1971).

Cognitive approaches have suggested that phobic individuals may be unusually sensitive or have more vulnerable *schemas* (knowledge structures) to interpret events (Beck & Emery, 1985). Thus they would be more predisposed to develop phobias.

Biological approaches have emphasized the *evolutionary basis* of anxiety disorders. This emphasis derives from the fact that anxiety is not only a psychopathological symptom but also – and much more frequently – a ubiquitous human emotion. Twin studies suggest that there is a large inherited component of anxiety disorders as the concordance ratings for MZ (49 percent) is substantially larger than for DZ (4 percent) (Slater & Shields, 1969). This would indicate that genes are largely influential in determining the individual's *vulnerability* to anxiety disorders. Neuropsychological studies have shown that overactivity of the noradrenaline (norepinephrine) neurotransmitters is largely associated with anxiety attacks, whilst serotonin (another neurotransmitter and major regulator of emotionality) has sometimes been associated with the adaptational function of preparing the individual for danger and stress (Deakin & Graeff, 1991).

In line with the diathesis-stress model (see section 4.5), it should be noted that a combination of both psychological and biological theories can best help to understand the etiology of anxiety disorders. Thus genetic factors, which contribute to an individual's vulnerability, are likely to interact with environmental stressors, which *trigger* mental illness. A typical example is post-traumatic stress disorder (PTSD), which emerges as a reaction to stressful or traumatic events that exceed an individual's psychophysiological coping mechanisms.

#### 4.7.4 Eating disorders

Eating disorders, which include *anorexia* and *bulimia nervosa*, are a common psychological illness characterized by exacerbated worry about food, body shape, and weight, and related physical symptoms. More than any other mental illness, eating disorders are related to cultural, economic, and social factors, being much more common in western industrialized countries than others. This is probably due to the current western stereotype of beauty, which encourages women (and increasingly also men) to stay thin. Thus gender differences in eating disorders, a mental illness traditionally associated with women, have been reduced in the past 50 years or so.

The three major characteristics of anorexia nervosa are: (1) a serious and permanent concern about one's *body shape*, weight, and thinness; (2) an active pursuit and maintenance (through vomiting, dieting, or laxatives) of low *body weight*; and (3) the absence of menstrual periods in females, indicating a disturbance of hormonal status. Most anorexics start by dieting and can be objectively overweight initially, though their dieting efforts will persist after they have lost weight. Another common aspect is the experience of low self-esteem, for instance after being bullied at school or breaking up with a partner. In later phases of the illness, negative effects on relationships are typical, mostly driven by arguments about not eating. Thus psychotherapists have emphasized the importance of group/family therapy in treatment.

Like anxiety disorders, anorexia may be associated with the experience of anxiety, in particular when anorexic individuals fail to stop themselves from eating. Conversely, excessive concerns with food that successfully lead to a reduction of food intake will generate personal satisfaction and reduce anxiety. Anorexic individuals have often been described as quiet, unassertive, anxious, and sexually inexperienced. They also tend to be ambitious and achievement-oriented, but have low self-esteem. In any case, this mere combination of personality attributes is not enough to predict illness.

Approximately 25 percent of individuals who suffer from anorexia will have long-term difficulties, whilst the rest normally recover after one year of treatment (Hsu, 1990). Long-term symptoms may range from menstrual disorders in women to infertility, starvation, and even suicide. It is also not uncommon for anorexic individuals to develop *bulimia nervosa* before fully recovering. Unlike anorexia, bulimia is not associated with actual weight loss and abnormal body weight, but bulimic individuals are significantly more likely than the average person to indulge in alcohol and drugs consumption. Again, a combination of both

psychotherapy and psychopharmacological drugs constitutes the best treatment for eating disorders (Agras et al., 1992).

There has been much speculation about the etiology of eating disorders, particularly in recent years. Unlike other disorders, there is little evidence for the vulnerability hypothesis, though there is some proof of genetic influence as the concordance rate for relatives is 10 percent, compared to 2 percent in the general population (Theander, 1970). Twin studies have found higher concordance rates for MZ than DZ twins (Sullivan, Bulik, & Kendler, 1998). On the other hand, from a feminist perspective (Bemis, 1978), eating disorders have been explained as an attempt to conform to certain stereotypes (usually portrayed by the media), whilst the family interaction hypothesis focuses on the role of dysfunctional families (Minuchin, Rosman, & Baker, 1978), notably intrusive or overinvolved parents.

## 4.8 CRITICISMS OF THE DIAGNOSTIC APPROACH

Whereas the classification of syndromes into predefined diagnostic categories represents the dominant approach to mental illness in both psychiatry and psychopathology, there have been several opposing views, most notably criticisms by the anti-psychiatry movement (Szasz, 1960).

In his famous book *Madness and Civilization*, French philosopher Michel Foucault (1926–84) presented a comprehensive historical analysis highlighting the subjectivity underlying the idea of mental illness and the fact that madness has always been associated with punishment. In the Middle Ages, lepers, the homeless, and “lunatics” were locked up or shipped away; in the seventeenth century, they were imprisoned alongside criminals. Even with the introduction of treatment by the likes of Pinel and Tuke (see section 4.3), says Foucault, the aim was to *control* rather than help those suffering from mental illness. Tuke’s method was largely based on punishment and intimidation of the mad until they were able to behave like most people, whereas Pinel’s treatment included freezing showers and straitjackets. Likewise, preestablished definitions of mental illness may merely reflect a political maneuver to punish individuals who do not “fit” into desirable social models, and diagnostic manuals such as the ICD or DSM would be designed to justify medical and social action against individuals who, albeit not responsible for any crimes, deviate from the norm.

Critics of the diagnostic approach also include experimental psychologists, such as Bentall (1990), who questioned the scientific soundness of the notion of schizophrenia (see also Boyle, 1990). Evidence for the occurrence of hallucinations and other psychotic symptoms in normal populations has long suggested that there may be a “continuum” between mental illness and normality (Bentall, 1990; Galton, 1880; Laroie, DeFruyt, Van Os, Aleman, & Van der Linden, 2005). Indeed, Sarbin and Juhasz (1967, p. 353) argued that “Since the 1920s textbooks of general psychology have differentiated hallucinations from errors of perception by the simple expedient of locating them in separate chapters.” Even when hallucinations are indicative of mental illness, they are not exclusive of schizophrenia but can often be

found in affective psychoses such as mania (Taylor & Abrams, 1975).

## 4.9 DIMENSIONAL VIEW OF PSYCHOPATHOLOGY AND PERSONALITY DISORDERS

In recent years, there has been an increasing shift towards a *dimensional* view of psychopathology, that is, the idea that mental illnesses merely represent quantitative (as opposed to qualitative) departures from normal behavior. This approach is epitomized by the notion of **personality disorders**, defined as an “enduring pattern of inner experience and behavior that deviates from the expectations of the individual’s culture, is pervasive and inflexible, has an onset in adolescence or early adulthood, is stable over time, and leads to distress or impairment” (APA, 1994, p. 629). Less severe than major psychoses and famously conceptualized by Freud as

**personality disorder** a persistent pattern of thinking, feeling, and behaving that deviates from cultural expectations and impairs a person’s educational, occupational, and interpersonal functioning. Such disorders begin at a relatively early age, are stable over time, and are pervasive and inflexible

“character neuroses,” personality disorders affect an estimated 10–15 percent of the population (Zimmerman & Coryell, 1989). Although personality disorders may cause individuals to “feel at home in their own disordered condition” (O’Connor & Dyce, 2001, p. 1119), their disruptive nature is substantial and affects educational, occupational, and interpersonal functioning.

Whilst personality disorders represent “either extreme or significant deviations from the way the average individual in a given culture perceives, thinks, and feels” (WHO, 1993), they have been traditionally classified in categorical terms. Thus *Axis 2* of the DSM (in its current as well as previous 1980 edition) lists the following clusters:

- Cluster A: *antisocial* (the most widely researched and oldest personality disorder, previously known as “psychopathic”), *borderline*, *narcissistic*, and *histrionic*, which are characterized by odd and eccentric behaviors as well as disregard for others.
- Cluster B: *schizotypal*, *schizoid*, and *paranoid*, which are characterized by dramatic, erratic, and emotional behaviors.
- Cluster C: *avoidant*, *obsessive-compulsive*, *dependent*, and *passive-aggressive*, which are characterized by anxious and fearful behaviors.

Despite widespread agreement on the above list, which is purely descriptive, mainstream personality researchers are hoping that the next revision of the DSM shifts to a dimensional model of personality disorders (McCrae, Loeckenhoff, & Costa, 2005). Indeed, a recent issue of the *European Journal of Personality* (2005) was entirely devoted to the cause of a model that integrates normal and abnormal classifications of personality along a continuum, with a focus on psychometric inventories (both self- and other-reports) rather than the currently dominant unstructured

**Table 4.2** The Big Five and personality disorders

DSM-IV personality disorders	Five Factor model personality dimensions				
	N	E	O	A	C
Paranoid	.28****	-.12****	-.04**	-.34****	-.07****
Schizoid	.13****	.23****	-.12****	-.17****	-.03*
Schizotypal	.36****	.28****	-.01	-.21****	-.13****
Antisocial	.09****	.04	.05**	-.35****	-.26****
Borderline	.49****	-.09****	.02	-.23****	-.23****
Histrionic	.02	.42****	.15****	-.06**	-.09***
Narcissistic	.04	.20****	.11****	-.27****	-.05*
Avoidant	.48****	-.44****	-.09****	-.11****	-.10****
Dependent	.41****	-.13****	-.11****	.05**	-.14****
Obsessive-compulsive	.08****	-.12****	-.07****	-.04	.23****
Mean	.24	-.07	-.01	-.17	-.09
Median	.20	-.12	-.02	-.19	-.09

Source: Saulsman & Page (2004), Table 5, p. 1068. Reproduced with permission from Elsevier.

interviews (Westen, 1997). Thus Widiger and Samuel (2005, p. 279) argued that “few clinicians would attempt to diagnose mental retardation in the absence of a structured test, yet this is the norm for most other diagnoses.”

Trull and Durrett (2005) proposed a dimensional model that conceptualizes abnormal and normal personality in terms of four common factors, namely, *Neuroticism/negative affect/emotional dysregulation*, *Extraversion/positive affect, dissocial/antagonistic behavior*, and *Conscientiousness/constraint/compulsivity*. This taxonomy is consistent with several previous studies (e.g., Austin & Deary, 2000; Livesley, Jang, & Vernon, 1998; O'Connor & Dyce, 2001) and suggests that, except for Openness to Experience, the same latent factors cause responses to both clinical and non-clinical personality inventories, which implies that they can be simultaneously used to describe normal and abnormal patterns of behavior. Accordingly, it should be possible to use specific levels and combinations of the Big Five personality traits to describe and predict personality disorders, but which ones?

In a recent meta-analysis of more than 15 studies (1967–2001), Saulsman and Page (2004) looked at the particular combination of the Big Five associated with each personality disorder, as well as the recurrent pattern of Big Five correlates of personality disorders. Table 4.2 summarizes these findings.

As can be seen, most personality disorders were positively correlated with Neuroticism (N), and negatively correlated with Agreeableness (A) and Conscientiousness (C). The Extraversion (E) and Openness (O) correlates of personality disorders are more variable in both direction and strength. For instance, people with histrionic personality disorder tend to be substantially higher on E, whilst those with avoidant personality disorder tend to be substantially lower on E. O, on the other hand, was negatively associated with schizoid but positively associated with histrionic personality disorders. The mean effects suggest that N (positively) is the most significant correlate of personality disorders, followed by A (negatively).

A clear advantage of incorporating a dimensional model in psychopathology would be the capacity to explain the stability of

personality disorders as these are extreme variations of genetically influenced traits (Cloninger, 1987; Zuckerman, 1991). Normal traits, such as the Big Five, are fairly stable throughout the lifespan, with typical reliabilities in the region of .50 over a 10-year period. Drastic changes are particularly odd for Neuroticism and Extraversion (the two classic dimensions of temperament) and after the age of 30 years.

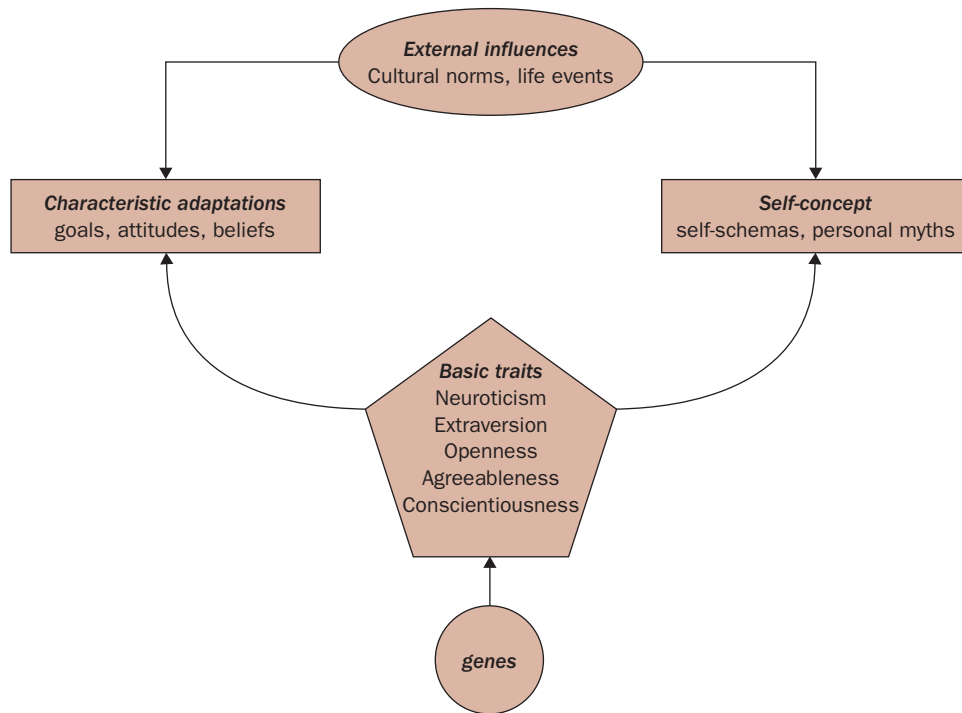
Although the notion of stability seems incompatible with the idea of treatment – the success of psychotherapy, for instance, is largely based on the possibility of introducing change – this conflict is mainly apparent. Thus Costa and McCrae (1994, p. 35) explained that “behaviors, attitudes, skills, interests, roles, and relationships change over time, but in ways that are consistent with the individual’s underlying personality.”

Whereas personality traits are largely the product of genetic influences, “the personality pathology is found in the characteristic adaptations, not the basic tendencies” (McCrae et al., 2005, p. 273). In Figure 4.5 (adapted from McCrae & Costa, 1999), we can see how biologically based personality dimensions may affect an individual’s adaptation and self-concept, which would in turn be affected by external influences (e.g., cultural and social norms, life events). Psychotherapy and other forms of treatment may be regarded as external influences, too.

## 4.10 SUMMARY AND CONCLUSIONS

In this chapter I have examined theories of psychopathology, an important area of psychology with historical roots dating back more than two thousand years. As seen:

1. Throughout its history, the ongoing leitmotiv of psychopathology has been the study of abnormal behavior. Modern conceptualizations of normality are based primarily on the four conventional criteria of statistical frequency, personal distress, social norms, and maladaptiveness, as well as the mental illness or diagnostic approach from mainstream



**Figure 4.5** A simplified adaptation of McCrae & Costa's (1999) dynamic personality model.

clinical psychology and psychiatry. Despite their individual weaknesses and limitations, when combined these criteria represent an important tool for identifying psychopathological symptoms and are thus widely employed.

2. There is broad consensus today on the idea that most psychological disorders are caused by a combination of genetic dispositions, known as diatheses, and situational demands, known as stress, that trigger the onset of psychopathological symptoms. Genetic influences on psychopathology are stronger in some mental illnesses, such as schizophrenia (the psychological disorder in which genes play the strongest role), than others, for instance eating disorders. This is clear from the effects of medication (i.e., psychoactive drugs) and recent studies in brain processes and structure.
3. A great deal of the progress of differential psychology will depend on the extent to which personality theory and psychopathology can accurately define the boundaries between normality and abnormality. This may require a shift from qualitative to quantitative or dimensional conceptions of abnormality. The latter has been increasingly advocated in the study of personality disorders and regards mental illness

as an extreme and maladaptive manifestation of normal personality.

In chapter 5, I will introduce the concept of intelligence, which, together with personality, represents one of the two major areas of individual differences.

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