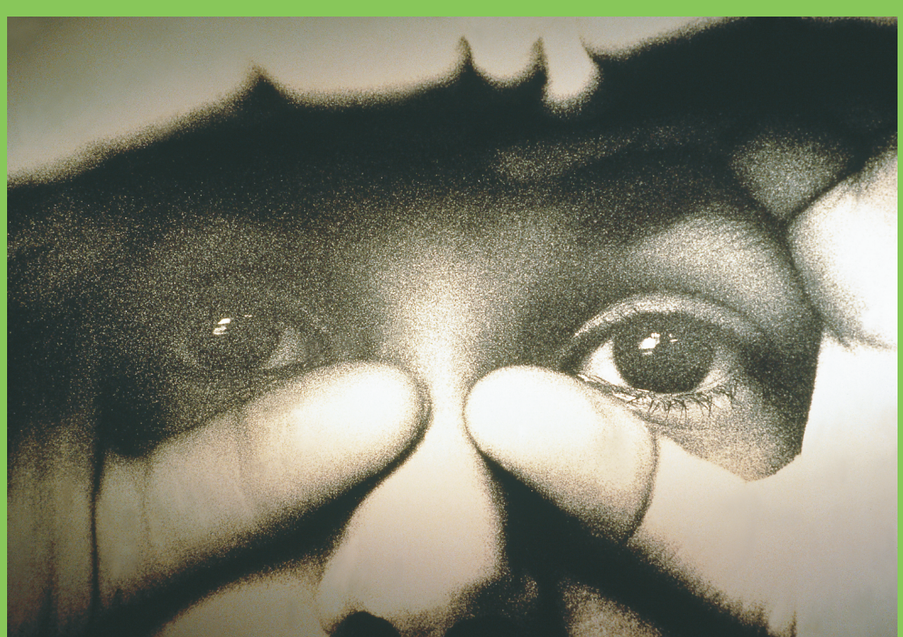
1

What Is Abnormal Psychology?

CHAPTER OUTLINE

Did You Know That...

- About one in five adults in Canada will be diagnosed with a psychological disorder at some point in their lives?
- Behaviour we consider abnormal may be perceived as perfectly normal in another culture?
- The modern medical model of abnormal behaviour can be traced to the work of a Greek physician some 2500 years ago?
- A night on the town in London, Ontario, in the 19th century may have included peering at the residents of a local asylum?
- At one time, there were more patients occupying psychiatric hospital beds than there were patients in hospital beds due to all other causes?



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clinical psychologist Person with graduate training in psychology who specializes in abnormal behaviour. He or she must be registered and licensed with a provincial psychological regulatory body in order to provide psychological services in that province.

psychiatrist Physician who specializes in the diagnosis and treatment of mental disorders.

psychological disorders Disturbances of psychological functioning or behaviour associated with states of personal distress or impaired social, occupational, or interpersonal functioning. Also called *mental disorders.*

abnormal psychology Branch of psychology that deals with the description, causes, and treatment of abnormal behaviour patterns.

medical model Biological perspective in which abnormal behaviour is viewed as symptomatic of underlying illness.

Abnormal behaviour might appear to be the concern of only a few. After all, only a minority of the population will ever be admitted to a psychiatric hospital. Most people never seek the help of a **clinical psychologist** or **psychiatrist**. Only a few people plead not criminally responsible on account of a mental disorder. Many of us have what we call an "eccentric" relative, but few of us have relatives we would consider truly bizarre.

The truth of the matter is that abnormal behaviour affects virtually everyone in one way or another. Abnormal behaviour patterns that involve a disturbance of psychological functioning or behaviour are classified as **psychological disorders** (also called *mental disorders*). Health Canada's (2002b) *Report on Mental Illness in Canada* suggests that about 20% of Canadians will experience a psychological disorder at some time in their lives. The report also found that psychological disorders requiring hospitalization were most common among people in the 25- to 44-year age range and declined with increasing age. Women, essentially at all ages, had higher rates and more days of hospitalization for the seven most common psychological disorders leading to hospital admission (Health Canada, 2002b). If we also include the mental health problems of our family members, friends, and co-workers, then perhaps none of us remain unaffected.

Abnormal psychology is the branch of the science of psychology that addresses the description, causes, and treatment of abnormal behaviour patterns. Let us pause for a moment to consider our use of terms. We prefer to use the term *psychological disorder* when referring to abnormal behaviour patterns associated with disturbances of psychological functioning, rather than *mental disorder*. There are a number of reasons why we have adopted this approach. First, *psychological disorder* puts the study of abnormal behaviour squarely within the purview of the field of psychology. Second, the term *mental disorder* is generally associated with the **medical model** perspective, which considers abnormal behaviour patterns to be symptoms of underlying mental illnesses or disorders. Although the medical model remains a prominent perspective for understanding abnormal behaviour patterns, we shall see that other perspectives, including psychological and sociocultural perspectives, also inform our understanding of abnormal behaviour. Third, *mental disorder* as a phrase reinforces the traditional distinction between mental and physical phenomena. As we'll see, there is increasing awareness of the interrelationships between the body and the mind that calls into question this distinction.

In this chapter, we first address the task of defining abnormal behaviour. We see that throughout history, and even in prehistory, abnormal behaviour has been viewed from different perspectives or according to different models. We chronicle the development of concepts of abnormal behaviour and its treatment. We see that, historically speaking, *treatment* usually referred to what was done *to*, rather than *for*, people with abnormal behaviour. Finally, we'll introduce you to current perspectives on abnormal behaviour.

HOW DO WE DEFINE ABNORMAL BEHAVIOUR?

Most of us become anxious or depressed from time to time, but our behaviour is not deemed abnormal. It is normal to become anxious in anticipation of an important job interview or a final examination. It is appropriate to feel depressed when you have lost someone close to you or when you have failed at a test or on the job. But when do we cross the line between normal and abnormal behaviour?

One answer is that emotional states like anxiety and depression may be considered abnormal when they are not appropriate to the situation. It is normal to feel down because of failure on a test, but not when one's grades are good or excellent. It is normal to feel anxious during a job interview, but not whenever entering a department store or boarding a crowded elevator.

Abnormal behaviour may also be suggested by the magnitude of the problem. Although some anxiety is normal enough before a job interview, feeling your heart hammering away so relentlessly that it might leap from your chest—and consequently cancelling the interview—is not. Nor is it normal to feel so anxious in this situation that your clothing becomes soaked with perspiration.

Criteria for Determining Abnormality

Abnormal behaviour thus has multiple definitions. Depending on the case, some criteria may be weighted more heavily than others. But in most cases, a combination of these criteria is used to define abnormality. Precisely how mental health professionals assess and classify abnormal behaviour is described in Chapter 2, "Assessment, Classification, and Treatment of Abnormal Behaviour."

Psychologists generally apply some combination of the following criteria in making a determination that behaviour is abnormal:

1. *Behaviour is unusual.* Behaviour that is unusual is often considered abnormal. Only a few of us report seeing or hearing things that are not really there; "seeing things" and "hearing things" are almost always considered abnormal in our culture, except, perhaps, in cases of religious experience. Yet **hallucinations** are not deemed unusual in some non-Western cultures. Being overcome with feelings of panic when entering a department store or when standing in a crowded elevator is also uncommon and considered abnormal. But uncommon behaviour is not in itself abnormal. Only one person can hold the record for swimming or running the fastest 100 metres. The record-holding athlete differs from the rest of us but, again, is not considered abnormal.
2. *Behaviour is socially unacceptable or violates social norms.* All societies have norms (standards) that define the kinds of behaviours acceptable in given contexts. Behaviour deemed normal in one culture may be viewed as abnormal in another. In our society, standing on the street corner and repeatedly shouting "Kill 'em!" to passersby would be labelled abnormal; shouting "Kill 'em!" in the arena at a professional wrestling match is usually within normal bounds.

   Although the use of norms remains one of the important standards for defining abnormal behaviour, we should be aware of some limitations of this definition.

   One implication of basing the definition of abnormal behaviour on social norms is that norms reflect relative, cultural standards, not universal truths. What is normal in one culture may be abnormal in another. For example, Canadians who assume strangers are devious and try to take advantage are usually regarded as distrustful, perhaps even **paranoid**. But such suspicions were justified among the Mundugumor, a tribe of cannibals in Papua New Guinea studied by anthropologist Margaret Mead (1935). Within that culture, male strangers, even the male members of one's own family, *were* typically spiteful toward others.

hallucinations Perceptions that occur in the absence of an external stimulus that are confused with reality.

paranoid Having irrational suspicions.

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When is anxiety abnormal? Negative emotions such as anxiety are considered abnormal when they are judged to be excessive or inappropriate to the situation. Anxiety is generally regarded as normal when it is experienced during a job interview, so long as it is not so severe that it prevents the interviewee from performing adequately. Anxiety is deemed to be abnormal if it is experienced whenever one boards an elevator.

Clinicians such as psychologists and psychiatrists need to weigh cultural differences in determining what is normal and abnormal. In the case of the Mundugumor, this need is more or less obvious. Sometimes, however, differences are subtler. For example, what is seen as normal, outspoken behaviour by most Canadian women might be interpreted as brazen behaviour when viewed in the context of another, more traditional culture. Moreover, what strikes one generation as abnormal may be considered by others to fall within the normal spectrum. For example, until the mid-1970s, homosexuality was classified as a mental disorder by the psychiatric profession (see Chapter 9, "Gender Dysphoria, Paraphilic Disorders, and Sexual Dysfunctions"). Today, however, the psychiatric profession no longer considers homosexuality a mental disorder. Indeed, roughly two thirds of Canadians now express approval of same-sex relationships (Bibby, 2006).

Another implication of basing normality on compliance with social norms is the tendency to brand nonconformists as mentally disturbed.

3. *Perception or interpretation of reality is faulty.* Normally speaking, our sensory systems and cognitive processes permit us to form fairly accurate mental representations of the environment. But seeing things and hearing voices that are not present are considered hallucinations, which in our culture are often taken as signs of an underlying disorder. Similarly, holding unfounded ideas or **delusions**, such as **ideas of persecution** that the Mounties or the Mafia are out to get you, may be regarded as signs of mental disturbance—unless, of course, they *are*.

delusions Firmly held but inaccurate beliefs that persist despite evidence that they have no basis in reality.

ideas of persecution A form of delusional thinking characterized by false beliefs that one is being persecuted or victimized by others.

It is normal in Canada to say that one "talks" to God through prayer. If, however, a person claims to have literally seen God or heard the voice of God—as opposed to, say, being divinely inspired—we may come to regard her or him as mentally disturbed.

4. *The person is in significant personal distress.* States of personal distress caused by troublesome emotions, such as anxiety, fear, or depression, may be considered abnormal. As noted earlier, however, anxiety and depression are sometimes appropriate responses to a situation. Real threats and losses occur from time to time, and the *lack* of an emotional response to them would be regarded

CP Photo/AP Photo/ChristofStache

Is this abnormal? One of the criteria used to determine whether behaviour is abnormal is whether it deviates from acceptable standards of conduct or social norms. The behaviour and attire of these spectators might be considered abnormal in the context of a classroom or workplace, but perhaps not at a sporting event.

as abnormal. Appropriate feelings of distress are considered normal unless they become prolonged or persist long after the source of anguish has been removed (after most people would have adjusted) or if they are so intense that they impair the individual's ability to function.

5. *Behaviour is maladaptive or self-defeating.* Behaviour that leads to unhappiness rather than self-fulfillment can be regarded as abnormal. Behaviour that limits our ability to function in expected roles or to adapt to our environments may also be considered abnormal. According to these criteria, then, heavy alcohol consumption that impairs health or social and occupational functioning may be viewed as abnormal. **Agoraphobia**, behaviour characterized by an intense fear of venturing into public places, may be considered abnormal in that it is uncommon and also maladaptive because it impairs the individual's ability to fulfill work and family responsibilities.

agoraphobia Excessive, irrational fear of open places.

6. *Behaviour is dangerous.* Behaviour that is dangerous to oneself or other people may be considered abnormal. Here, too, social context is crucial. In wartime, people who sacrifice themselves or charge the enemy with little apparent concern for their own safety may be characterized as courageous, heroic, and patriotic. But people who threaten or attempt suicide because of the pressures of civilian life are usually considered abnormal.

   Football and hockey players (and even adolescents) who occasionally get into altercations may be normal enough. Given the cultural demands of these sports, nonaggressive football and hockey players would not last long in varsity or professional ranks. But individuals involved in frequent unsanctioned fights may be regarded as abnormal.

Cultural differences in how abnormal behaviour patterns are expressed lead us to realize that we must determine that our concepts of abnormal behaviour are recognizable and valid before we apply them to other cultures (Bebbington, 1993; Kleinman, 1987). The reverse is equally true. The concept of "soul loss" may characterize psychological distress in some non-Western societies but has little or no relevance to middle-class North Americans. Evidence from multinational studies conducted by the World Health

FOCUS ON DIVERSITY

Healing the Whole Person: The Canadian Aboriginal Perspective

Canadian census data show that our Aboriginal population continues to be the fastest-growing segment of the population. The highest concentrations of Canada's more than 1.3 million Aboriginal peoples are in the North and West, and just over one half are now living in urban centres throughout Canada (Statistics Canada, 2003). Along with rapid population growth, there is evidence of the resurgence of Canadian Aboriginal cultures, especially in the arts, media, education, commerce, and health (Aboriginal Planet, 2002; Arthur & Stewart, 2001; Fraser, 1994; Letendre, 2002).

Despite this optimistic outlook, Aboriginal peoples in Canada are still dealing with the effects of generations of physical, mental, emotional, and spiritual distress caused by the decimation of their communities, lands, and cultural identities. Consequently, both on- and off-reserve Aboriginal peoples have to contend with extensive mental health, addiction, and medical issues in their communities as compared to the rest of Canadians. In particular, Canadian Aboriginals suffer from disproportionately higher rates of major depression, anxiety, posttraumatic stress disorder, alcoholism and substance abuse, sexual abuse, family violence, chronic disease such as heart disease and diabetes, lower life expectancy, and suicide (Statistics Canada, 2002).

Centuries of extreme social, cultural, and geographic disruption have contributed to the distress suffered by Aboriginal people. The arrival of European settlers resulted in an estimated 90% decline in Aboriginal populations (Trigger & Swagerty, 1996). The remaining Aboriginals were exposed to widespread, inescapable social and cultural disruption caused by government-sanctioned separation of children from their parents and communities plus systematic efforts to force Aboriginal people to take on non-Aboriginal cultural values at the cost of becoming disconnected from their own. This process of cultural assimilation was enforced by the relocation and social regrouping of Aboriginal peoples onto remote reserves, by placing Aboriginal children into residential boarding schools, and by unwittingly creating a forced dependence on government support. Poverty and powerlessness further marginalized Aboriginal peoples and their cultural traditions from mainstream society (Poonwassie & Charter, 2001). Aboriginal peoples' survival of and recovery from this long-standing personal and social devastation are a testament to their strength and long-suffering determination. Moreover, it gives credence to the significance and legitimacy of their perception of life, and, despite great odds, a distinctive Aboriginal perspective has survived to challenge the established Canadian ideas of treatments and cures.

MAINSTREAM TREATMENT OF ABORIGINAL ILLNESSES HAS PROVED LACKING

Mainstream health-care approaches have not been readily accessible or reasonably successful at treating and preventing Aboriginal peoples' physical and mental health problems (McCormick, 2000; Wieman, 2001). There were well-intentioned attempts to change the way that "experts" dealt with Aboriginal health problems during the last decades of the 20th century, but, at best, medical and

Organization (WHO) in the 1960s and 1970s shows that the behaviour pattern we characterize as schizophrenia exists in countries as wide-ranging as Colombia, India, China, Denmark, Nigeria, and the former Soviet Union (Jablensky et al., 1992). Rates of schizophrenia and its general features were actually quite similar among all countries studied. Societal views or perspectives on abnormal behaviour also vary across cultures. In our society, models based on medical disease and psychological factors have achieved prominence in explaining abnormal behaviour. But in traditional cultures, concepts of abnormal behaviour often invoke supernatural causes, such as possession by demons or the devil (Lefley, 1990).

It is one thing to recognize and label behaviour as abnormal; it is another to understand and explain it. Philosophers, physicians, natural scientists, and psychologists have used various approaches, or *models*, in the effort to explain abnormal behaviour. Some approaches have been based on superstition; others have invoked religious explanations. Some current views are predominantly biological; others are psychological. We consider various historical and contemporary approaches to understanding abnormal behaviour. First, let us look further at the importance of cultural beliefs and expectations in determining which behaviour patterns are deemed abnormal.

counselling professionals adopted as truth a range of overgeneralized, simplified, and under-researched beliefs about Aboriginal cultural values and behaviours. Overreliance on Aboriginal cultural stereotypes led to a cookie-cutter, one-size-fits-all, condescending approach to treatment and counselling that has netted few overall gains in health and well-being for Aboriginal peoples. This lack of success creates a formidable challenge and opportunity, especially for the non-Aboriginal health-care practitioner to become an effective partner in a meaningful healing process (Waldram, 2001, 2004).

ABORIGINAL HEALING

Aboriginal healing and wellness promotion place a high value on the balance between the interconnected physical, mental, emotional, and spiritual aspects of life. As such, healing and wellness promotion are multi-levelled, targeting the individual as well as the family and the community, while respecting both individual and group languages, customs, history, and environment (D. B. Smith & Morrissette, 2001). This may ultimately evolve into a healing paradigm in which not only will Canadian health practitioners change the way they approach Aboriginal peoples but the Aboriginal healing perspective will influence how practitioners approach members of any and all cultural minority groups. Ultimately, a holistic healing perspective may come to permeate and transform mainstream health, mental health, social services, and care practices in Canada (Poonwassie & Charter, 2001).

CP Photo/Fred Chartrand

A Canadian Aboriginal smudging ceremony. Sacred medicinal plants such as sweetgrass, tobacco, sage, and cedar are ignited in a bowl or seashell and allowed to smoulder. Following ancient, traditional rituals, the smoke is used to purify, cleanse, and heal the mind, body, soul, and spirit. Although there is no one thing that on its own leads to healing, a smudging ceremony is an important aspect of the larger Aboriginal healing perspective. It serves to strengthen cultural identity, which builds self-respect. As the Aboriginal people become aware of who they are, then a sense of connectedness with nature and the Creator, healthier ways of living, and improved physical and mental well-being will follow (A. Magiskan, personal communication, February 10, 2004).

Source: Ann Magiskan is of Ojibwa heritage and is responsible for the Native Heritage programs at Fort William Historical Park.

Risk Factors

In a major Canadian study of psychological health, Stephens, Dulberg, and Joubert (1999) determined that key risk factors include age, education, childhood traumas, current stress, life events, social supports, gender, and physical health. To confuse matters, exposure to multiple risk factors can have an exponential effect that dramatically increases the likelihood of adverse outcomes (Masten, 2001). Exposure to just two risk factors can engender a fourfold increase in adverse outcomes, and four or more risk factors can increase adversity tenfold (Luthar & Cicchetti, 2000; Rutter, 1999). In addition to acting synergistically, risk factors can generate a negative chain reaction whereby exposure to new risks perpetuates and intensifies existing problems.

This can set into motion a self-reinforcing negative spiral (Baylis, 2002). Individually, risk factors do not present a high probability of psychopathology, but they have a strong effect in combination. Multiple risk factors greatly increase the likelihood of adverse outcomes (Masten, 2001).

Prevention and Resilience

Prevention efforts focus on risk factors with the expectation that when these are reduced or eliminated, the incidence of mental health problems will drop. Strategies that promote resilience and enhance an individual's psychological resources can also contribute to problem reduction and even prevention (Stephens et al., 1999). In light of this, viable mental health promotion strategies are needed to establish conditions that foster resilience and support. For instance, the more protective factors there are available to a child, the more likely the child is to experience resilience in the face of adversity and to cope effectively with challenges to both mental and physical functioning (Baylis, 2002).

Resilience is the display of positive adaptation in the face of adversity (Baylis, 2002). It's the capacity to bounce back from our lows and learn from them in a positive way. It's the vital sense of flexibility and the capacity to re-establish one's own balance. It's the essential feeling of being in control with regard to oneself and the outside world (Mental Health Promotion [MHP], 2003). Resilience does not come solely from within an individual but is engendered by family and community. We need to foster resilience within families and communities rather than merely try to make an individual resilient. Neither children nor adults should be viewed in isolation as the sole focus of change, treatment, or enhancement (Baylis, 2002).

Personal and Social Costs of Poor Mental Health

While most Canadians would agree that mental health care is a priority, the true extent and cost of poor mental health have been underestimated (Canadian Alliance on Mental Illness and Mental Health [CAMIMH], 2000; Prevention-Dividend Project, 2003; Stephens & Joubert, 2001). Measures of nonmedical services and of short-term disability are excluded because large numbers of Canadians seek treatment outside of the medical system. Specifically, direct costs related to visits to nonmedical mental health professionals are not fully accounted for. Indirect costs, including lost days of work, lowered productivity, and the drain on other resources (such as family and co-workers), are even harder to track. When morbidity and mortality issues are factored into the equation, poor mental health is one of the costliest health conditions in Canada (CAMIMH, 2000), with the conservative estimated cost of treatment to be over $14 billion annually (Stephens & Joubert, 2001). We'll come back to current views later in the chapter, but for now we'll take a step back in time to explore the historical roots of abnormal behaviour.

REVIEW IT

How Do We Define Abnormal Behaviour?

- **What are the criteria used by mental health professionals to define abnormal behaviour?** Psychologists generally consider behaviour abnormal when it meets some combination of the following criteria: (1) unusual or statistically infrequent; (2) socially unacceptable or in violation of social norms; (3) fraught with misperceptions or misinterpretations of reality; (4) associated with states of severe personal distress; (5) maladaptive or self-defeating; and (6) dangerous.
- **What are psychological disorders?** Psychological disorders (also called *mental disorders*) involve abnormal behaviour patterns associated with disturbances in mental health or psychological functioning.
- **How are cultural beliefs and norms related to the classification and understandings of abnormal behaviour?** Behaviours deemed normal in one culture may be considered abnormal in another. Concepts of health and illness may have different meanings in different cultures. Abnormal behaviour patterns may also take different forms in different cultures, and societal views or models explaining abnormal behaviour vary across cultures as well.

HISTORICAL PERSPECTIVES ON ABNORMAL BEHAVIOUR

Throughout the history of Western culture, concepts of abnormal behaviour have been shaped, to some degree, by the prevailing **world view** of the time. Throughout much of history, beliefs in supernatural forces, demons, and evil spirits held sway. Abnormal behaviour was often taken as a sign of **possession**. In more modern times, the predominant—but by no means universal—world view has shifted toward beliefs in science and reason. Abnormal behaviour has come to be viewed in our culture as the product of physical and psychosocial factors, not demonic possession.

world view Prevailing view of the times. (English translation of the German *Weltanschauung*.)

possession In demonology, a type of superstitious belief in which abnormal behaviour is taken as a sign that the individual has become possessed by demons or the devil, usually as a form of retribution or the result of making a pact with the devil.

The Demonological Model

Let us begin our journey with an example from prehistory. Archaeologists have unearthed human skeletons from the Stone Age with egg-sized cavities in the skulls. One interpretation of these holes is that our prehistoric ancestors believed abnormal behaviour reflected the invasion of evil spirits. Perhaps they used this harsh method—called **trephining**—to create a pathway through the skull to provide an outlet for those irascible spirits. Fresh bone growth indicates that some people managed to survive the ordeal.

Threat of trephining may have persuaded people to comply with group or tribal norms to the best of their abilities. Because no written records or accounts of the purposes of trephination exist, other explanations are possible. Perhaps trephination was used as a primitive form of surgery to remove shattered pieces of bone or blood clots that resulted from head injuries (Maher & Maher, 1985).

trephining Harsh prehistoric practice of cutting a hole in a person's skull, possibly as an ancient form of surgery for brain trauma, or possibly as a means of releasing the demons that prehistoric people may have believed caused abnormal behaviour in the afflicted persons.

Explanation of abnormal behaviour as a result of supernatural or divine causes is termed the **demonological model**. Ancient peoples explained natural forces in terms of divine will and spirits. The ancient Babylonians believed that the movements of the stars and planets were fashioned by the adventures and conflicts of the gods. The ancient Greeks believed that their gods toyed with humans; when aroused to wrath, the gods could unleash forces of nature to wreak havoc on disrespectful or arrogant humans, even clouding their minds with madness.

demonological model The model that explains abnormal behaviour in terms of supernatural forces.

Origins of the Medical Model: An "Ill Humour"

Not all ancient Greeks believed in the demonological model. The seeds of naturalistic explanations of abnormal behaviour were sown by Hippocrates and developed by other physicians in the ancient world, especially Galen.

Hippocrates (ca. 460–377 BC), the celebrated physician of the Golden Age of Greece, challenged the prevailing beliefs of his time by arguing that illnesses of the body and mind were the result of natural causes, not of possession by supernatural spirits. He believed that the health of the body and mind depended on the balance of **humours** or vital fluids: phlegm, black bile, blood, and yellow bile. An imbalance of humours, he thought, accounted for abnormal behaviour. A lethargic or sluggish person was believed to have an excess of phlegm, from which we derive the word **phlegmatic**. An overabundance of black bile was believed to cause depression, or **melancholia**. An excess of blood created a **sanguine** disposition: cheerful, confident, and optimistic. An excess of yellow bile made people "bilious" and **choleric**—quick-tempered, that is.

Hippocrates's theory of bodily humours is of historical importance because of its break from demonology. It also foreshadowed the development of the modern medical model, the view that abnormal behaviour results from underlying biological processes. Medical schools continue to pay homage to Hippocrates by having new physicians swear the Hippocratic oath in his honour.

humours Four fluids in the body: phlegm, black bile, blood, and yellow bile. Hippocrates believed that the health of the body and mind depended on their balance.

phlegmatic Slow and stolid.

melancholia State of severe depression.

sanguine Cheerful.

choleric Having or showing bad temper.

Medieval Times

The Middle Ages, or medieval times, cover the millennium of European history from about AD 476 through AD 1450. Belief in supernatural causes, especially the doctrine of possession, increased in influence and eventually dominated medieval thought. The doctrine of possession held that abnormal behaviours were a sign of possession by evil spirits or the devil. This belief was embodied within the teachings of the Roman Catholic Church, which became the unifying force in Western Europe following the decline of the Roman Empire. Although belief in possession dates from before the Church and is found in ancient Egyptian and Greek writings, the Church revitalized it. The treatment of choice for abnormal behaviour was **exorcism**. Exorcists were employed to persuade evil spirits that the bodies of their intended victims were basically uninhabitable. Their methods included prayer, waving a cross at the victim, beating and flogging, and even starving the victim. If the victim still displayed unseemly behaviour, there were yet more powerful remedies, such as the rack, a device of torture. It seems clear that recipients of these "remedies" would be motivated to behave acceptably as much as possible.

exorcism Ritual intended to expel demons or evil spirits from a person believed to be possessed.

Witchcraft

The late 15th through the late 17th centuries were especially dangerous times to be unpopular with your neighbours. These were times of massive persecutions of people, particularly women, who were accused of witchcraft. Officials of the Roman Catholic Church believed that witches made pacts with the devil, practised satanic rituals, and committed heinous acts such as eating babies and poisoning crops. In 1484, Pope Innocent VIII decreed that witches must be executed. Two Dominican priests compiled a manual for witch-hunting, called the *Malleus Maleficarum* ("The Witches' Hammer"), to help inquisitors identify suspected witches. Over 100 000 accused witches were killed in the next two centuries.

Modern scholars once believed the so-called witches of the Middle Ages and the Renaissance were actually people who were mentally disturbed. They were believed to have been persecuted because their abnormal behaviour was taken as evidence that they were in league with the devil. It is true that many suspected witches confessed to impossible behaviours; however, most of these confessions can be discounted because they were extracted under torture by inquisitors who were bent on finding evidence to support accusations of witchcraft (Spanos, 1978). Accusations of witchcraft appeared to be a convenient means of disposing of social nuisances and political rivals, of seizing property, and of suppressing heresy (Spanos, 1978). In English villages, many of the accused were poor, unmarried elderly women, who were forced to beg their neighbours for food. If misfortune befell people who declined to help, the beggar might be accused of causing misery by having cast a curse on the uncharitable family (Spanos, 1978). If the woman was generally unpopular, accusations of witchcraft were more likely to be followed up.

The Granger Collection, NYC

Exorcism. This medieval woodcut illustrates the practice of exorcism, which was used to expel evil spirits who were believed to have possessed people.

Historical trends do not follow straight lines. Although the demonological model held sway during the Middle Ages and much of the Renaissance, it did not universally replace belief in naturalistic causes (Schoeneman, 1984). In medieval England, for example, demonic possession was only rarely invoked as the cause of abnormal behaviour in cases in which a person was held to be insane by legal authorities (Neugebauer,

1979). Most explanations of unusual behaviour involved natural causes, such as illness or trauma to the brain. In England, in fact, some disturbed people were kept in hospitals until they were restored to sanity (Allderidge, 1979). The Renaissance Belgian physician Johann Weyer (1515–1588) also took up the cause of Hippocrates and Galen by arguing that abnormal behaviour and thought patterns were caused by physical problems.

Asylums in Europe and the New World

By the late 15th and early 16th centuries, asylums, or *madhouses*, began to crop up throughout Europe. Many were former leprosariums that were no longer needed as a result of the decline in leprosy that occurred in the late Middle Ages. Asylums often gave refuge to beggars as well as the disturbed, and conditions were generally appalling. Residents were often chained to their beds and left to lie in their own waste or wander about unassisted. Some asylums became public spectacles. In the 19th century, it was standard operating procedure at many Ontario asylums (found in Toronto, Hamilton, and London) to open to public viewing from noon until 3 p.m. every day (Miron, 2006).

Jerry Cooke/PhotoResearchers Collection/Getty Images Inc.

Madhouse, spectacle, or hospital? Standard operating procedure in many Ontario asylums was to allow the public to view the patients, making the hospitals a public spectacle.

The first asylum in what is now North America was the Hôtel Dieu in Quebec City. It was founded in 1639 by the Duchesse d'Aiguillon to care for people with psychological disorders and intellectual disabilities, as well as the poor, the destitute, and the physically disabled. The Catholic community took responsibility for the treatment of patients and oversaw the development of other asylums throughout Quebec (Hurd et al., 1916). Outside Quebec, however, people with psychological disorders received little treatment and were commonly shut away in jails, poorhouses, charity shelters, or another convenient stronghold. No means of addressing their needs came until well into the 19th century, when mental hospitals began to appear in other parts of Canada (Sussman, 1998).

The Reform Movement and Moral Therapy in Europe and North America

The modern era of treatment can be traced to the efforts of individuals such as the Frenchmen Jean-Baptiste Pussin and Philippe Pinel in the late 18th and early 19th centuries. They argued that people who behave abnormally suffer from diseases and should be treated humanely. This view was not popular at the time. Deranged people were generally regarded by the public as threats to society, not as sick people in need of treatment.

From 1784 to 1802, Pussin (1746–1811), a layman, was placed in charge of a ward for people considered "incurably insane" at La Bicêtre, a large mental hospital in Paris. Although Pinel is often credited with freeing the inmates of La Bicêtre from their chains, Pussin was actually the first official to unchain a group of the "incurably insane." These unfortunates had been considered too dangerous and unpredictable to be left unchained. But Pussin believed that if they were treated with kindness, there would be no need for chains. As he predicted, most of the shut-ins became manageable and calm when their chains were removed. They could walk the hospital grounds and take in fresh air. Pussin also forbade the staff from treating the residents harshly, and he discharged employees who ignored his directives.

Pinel (1745–1826) became medical director for the incurables' ward at La Bicêtre in 1793 and continued the humane treatment Pussin had begun. Pinel also spent hours

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The unchaining of inmates at La Bicêtre by 18th-century French reformer Philippe Pinel. Continuing the work of Jean-Baptiste Pussin, Pinel stopped harsh practices such as bleeding and purging, and moved inmates from darkened dungeons to sunny, airy rooms. Pinel also took the time to converse with inmates in the belief that understanding and concern would help restore them to normal functioning.

talking to inmates, in the belief that showing understanding and concern would help restore them to normal functioning.

moral therapy A 19th-century treatment philosophy that emphasized that hospitalized mental patients should be treated with care and understanding in a pleasant environment, not shackled in chains.

The philosophy of treatment that emerged from these efforts was labelled **moral therapy** (a mistranslation of the words for "well-being" or "morale") (Dix, 1999). It was based on the belief that providing humane treatment in a relaxed, decent, and encouraging environment could restore functioning. Similar reforms were instituted at about this time in England by William Tuke and later in the United States and Canada by Dorothea Dix.

Dix (1802–1887), a Boston schoolteacher, travelled throughout the United States, Europe, and Canada decrying the deplorable conditions in jails and charitable housing, where deranged people were often placed. As a direct result of her social activism, mental hospitals were established in Canada outside of Quebec, initially in the Maritimes during the 1840s, and later in the century in the other provinces.

Drugs and Deinstitutionalization: The Exodus from Provincial Psychiatric Hospitals

phenothiazines Group of antipsychotic drugs or "major tranquillizers" used in the treatment of schizophrenia.

An important factor that spurred the exodus from psychiatric hospitals was the advent of a new class of drugs—**phenothiazines**. The phenothiazines, a group of antipsychotic drugs that helped suppress the most flagrant behaviour patterns associated with schizophrenia, were introduced in Canada in the early 1950s. Two psychiatrists, unbeknownst to each other, had begun experimenting with chlorpromazine, a drug that was being used in conjunction with anaesthetics for surgery. They were curious about its soothing qualities and potential worth as a treatment for psychotic symptoms, and it wasn't long before their pioneering research produced far-reaching outcomes. In 1954, Dr. Ruth Kajander was the first in North America to publicly report on the drug's therapeutic value (Sussman, 1999). A month later, McGill University psychiatrist Heinz Lehmann published the first research paper for the North American audience describing his success in using chlorpromazine to treat schizophrenia (Griffin, 1993; Sussman, 1999). As a result of Kajander's and Lehmann's research, the widespread use of chlorpromazine as an antipsychotic drug in Canada and the United States quickly followed. Chlorpromazine reduced the need for indefinite hospital stays and permitted many people with schizophrenia to be discharged to less restrictive living arrangements in their community, such as halfway houses, group homes, and independent living arrangements. This was a crucial moment in the mental health-care system in Canada.

In response to the growing call for reform in the mental health system, the Canadian Mental Health Association (CMHA) published a report, *More for the Mind: A Study of Psychiatric Services in Canada* (Tyhurst et al., 1963), that recommended that mental illness be treated as a medical condition in a medical facility. This report paved the way for long-term custodial care patients, the so-called back-ward patients in bleak institutions, to be integrated into community general hospitals. This policy of **deinstitutionalization** was based on the belief—the hope, perhaps—that psychiatric patients would benefit from the opportunity to lead more independent and fulfilling lives in the community while relying on general hospitals for short-term care during episodes of illness. Indeed, the psychiatric hospital population across Canada plummeted from more than 50 000 in 1960 to 15 000 by 1975 (Wasylenki, 2001).

deinstitutionalization Practice of discharging large numbers of hospitalized mental patients to the community and of reducing the need for new admissions through the development of alternative treatment approaches such as halfway houses and crisis intervention services.

In the initial stages, during the 1960s and 1970s, there was a shift from long stays in provincial psychiatric hospitals to shorter but more frequent stays in general hospital psychiatric units. However, although the number of general hospital beds used for this purpose rose, it failed to match the shrinking number of psychiatric hospital beds. At the same time, the availability of more community mental health supports and services lagged far behind the rapid exodus of mental health patients from psychiatric hospitals (Sealy & Whitehead, 2004). The general hospital psychiatric units treated patients with less severe forms of mental disorders, while patients with severe and persistent mental disorders had to rely on the much-scaled-down provincial psychiatric hospital system. In effect, this created a two-tier mental health-care system, whereby middle- and upper-class patients had easier access to psychiatrists and general hospital psychiatric care than less fortunate Canadians, who were relegated to shrinking psychiatric hospital services or, worse, were left to lead a barely sufficient existence in the community (Kirby & Keon, 2004).

Services continued to be narrow in focus and were not well co-ordinated, thus making it difficult for patients to receive adequate and consistent care. The community programs and services that were supposed to replace institutional care have thus far been inadequate (Kirby & Keon, 2004; Wasylenki, 2001). Deinstitutionalization in Canada has left mental patients to rely on dramatically fewer hospital beds and a fragmented system of community services and supports. In "A Closer Look: The Homeless in Canada" on page 16, we consider the plight of the homeless Canadians with mental health issues who got lost in the shuffle between the movement toward the closure of psychiatric institutions and the promised, but thus far inadequate, community mental health-care system.

Until recently, Canada lacked a comprehensive mental health-care policy. In 2006, senators Michael Kirby and Wilbert Keon conducted the most comprehensive study of its kind in Canada on mental health, mental illness, and addiction. Their report, *Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada*, focused squarely on mental health promotion, prevention of mental illness, and the creation of a continuum of care for those who suffer from mental illness and addiction. The report recommended that a Canadian Mental Health Commission be established to implement a national mental health-care strategy. In March 2007, the federal government announced funding for the Commission, to be led by Senator Kirby.

Pathways to the Present: From Demonology to Science

Beliefs in possession or demonology persisted until the rise of the natural sciences in the late 17th and early 18th centuries. Society at large began to turn toward reason and science as ways of explaining natural phenomena and human behaviour. The emerging sciences of biology, chemistry, physics, and astronomy offered promise that knowledge could be derived from scientific methods of observation and experimentation. The 18th and 19th centuries witnessed rapid developments in medical science. Scientific discoveries uncovered the microbial causes of some kinds of diseases and gave rise to preventive measures. Emerging models of abnormal behaviour also began to surface, including the medical model, psychological models, and sociocultural models.

A CLOSER LOOK

A New Vision of Stigma Reduction and Mental Health Support for Young Adults

A FAMILY INSPIRES COMPASSION AND CARE AFTER LOSING THEIR SON TO SUICIDE

Jack Windeler was a first-year student at Queen's University who died by suicide in March of 2010. Jack's note asked that no fuss be made of his passing, but to "help others." Jack's parents began the Jack Windeler Memorial Fund in partnership with Kids Help Phone, Canada's leading counselling service for youth aged 5–20.

As an initiative of Kids Help Phone, and in partnership with the Mental Health Commission of Canada, the project seeks to promote mental health awareness and support for youth aged 15–20+ who are transitioning from high school to college, university, or independent living.

THE JACK PROJECT AT KIDS HELP PHONE

The mission of the project is to inspire a national culture of informed compassion and care for youth impacted by mental health challenges.

TWOFOLD SUPPORT SYSTEM

School Outreach: The Jack Project aligned with Canadian mental health organizations to develop a pilot program (2011–12 school year) at 36 schools across Ontario. Through this work, the team developed a model of care and a best practices toolbox that will be available to be implemented over time in institutions across Canada. These resources will be comprehensive, effective, and inclusive for assisting not only young people in transition, but also their peers, community members, and caregivers.

Technology Investment: The Jack Windeler Memorial Fund will make specific investments to Kids Help Phone's existing technologies. Key to this will be the launch of new support technology at Kids Help Phone, including:

(a) the launch of online chat and mobile applications that will link youth to the trained professionals at Kids Help Phone, and
(b) the automation of key aspects of Kids Help Phone's leading database of 37 000 referral youth-serving agencies across Canada.

Through these integrated online efforts, Kids Help Phone will educate and support youth where they spend increasing amounts of time (online), and will assist more youth to "self-navigate" to be better able to find assistance in their community.

Courtesy the Windeler family

Jack Windeler died by suicide during his first year of studies at Queen's University. He asked that others be helped.

MEDICAL MODEL Against the backdrop of advances in medical science, German physician Wilhelm Griesinger (1817–1868) argued that abnormal behaviour was rooted in diseases of the brain. Griesinger's views influenced another German physician, Emil Kraepelin (1856–1926), who in 1883 wrote an influential textbook on psychiatry in which he likened mental disorders to physical diseases. Griesinger and Kraepelin paved the way for the development of the modern medical model, which attempts to explain abnormal behaviour on the basis of underlying biological defects or abnormalities, not evil spirits. According to the medical model, people behaving abnormally suffer from mental illnesses or disorders that can be classified, like physical illnesses, according to their distinctive causes and symptoms and whose features can be conceptualized as symptoms of underlying disorders, whatever their cause.

dementia praecox Term given by Emil Kraepelin to the disorder we now call *schizophrenia*.

Kraepelin specified two main groups of mental disorders or diseases: **dementia praecox** (from roots meaning "precocious [premature] insanity"), which we now call *schizophrenia*, and *manic-depressive psychosis*, which is now labelled *bipolar disorder*. Kraepelin believed that dementia praecox was caused by a biochemical imbalance and manic-depressive psychosis by an abnormality in body metabolism. But his major contribution was the development of a classification system that forms the cornerstone of current diagnostic systems.

The medical model was supported by evidence that a form of derangement called **general paresis** represented an advanced stage of syphilis in which the syphilis bacterium directly invades brain tissue. Scientists grew optimistic that other biological causes, as well as treatments, would soon be discovered for other so-called mental disorders. This early optimism has remained largely unfulfilled because the causes of most patterns of abnormal behaviour remain obscure.

general paresis Degenerative brain disorder that occurs during the final stage of syphilis.

Much of the terminology in current use reflects the influence of the medical model. Because of the medical model, many professionals and laypeople speak of people whose behaviour is deemed abnormal as being mentally *ill*. It is because of the medical model that so many speak of the *symptoms* of abnormal behaviour rather than its *features* or *characteristics*. Other terms spawned by the medical model include *mental health*, *syndrome*, *diagnosis*, *patient*, *mental patient*, *mental hospital*, *prognosis*, *treatment*, *therapy*, *cure*, *relapse*, and *remission*.[1]

The medical model is a major advance over demonology. It inspired the idea that abnormal behaviour should be treated by learned professionals and not be punished. Compassion replaced hatred, fear, and persecution.

PSYCHOLOGICAL MODELS Although the medical model was gaining influence in the 19th century, there were those who believed that organic factors alone could not explain the many forms of abnormal behaviour. In Paris, a highly respected neurologist, Jean-Martin Charcot (1825–1893), experimented with the use of **hypnosis** in treating **hysteria** (which is now called *conversion disorder*), a condition in which people present with physical symptoms such as paralysis or numbness that cannot be explained by any underlying physical cause. The thinking at the time was that they must have an affliction of the nervous system that caused their symptoms. Yet Charcot and his associates demonstrated that these symptoms could be removed in hysterical patients or actually induced in normal patients by means of hypnotic suggestion.

hypnosis Trancelike state, induced by suggestion, in which one is generally passive and responsive to the commands of the hypnotist.

hysteria Former term for *conversion disorder*.

Among those who attended Charcot's demonstrations was a young Austrian physician named Sigmund Freud (1856–1939). Freud reasoned that if hysterical symptoms could be made to disappear or appear through hypnosis—the mere "suggestion of ideas"—they must be psychological in origin (E. Jones, 1953). He concluded that whatever psychological factors give rise to hysteria, they must lie outside the range of conscious awareness. This was the kernel of the idea that underlies his model of abnormal behaviour, the **psychodynamic model**, which holds that the causes of abnormal behaviours lie in the interplay of forces within the unconscious mind. "I received the proudest impression," Freud wrote of his experience with Charcot, "of the possibility that there could be powerful mental processes which nevertheless remained hidden from the consciousness of men" (cited in Sulloway, 1983, p. 32).

psychodynamic model Theoretical model of Freud and his followers in which behaviour is viewed as the product of clashing forces within the personality.

Freud's theoretical model was the first major psychological model of abnormal behaviour. As we'll see later in this chapter, other psychological perspectives on abnormal behaviour soon followed, based on behavioural, humanistic, and cognitive approaches. We'll also see that each of these psychological perspectives, as well as the physiological perspective, spawned particular forms of therapy to treat psychological disorders.

SOCIOCULTURAL MODELS Sociocultural theorists believe that to better understand the roots of abnormal behaviour, we must consider the broader social contexts in which behaviour occurs. They believe that the causes of abnormal behaviour may be found in the failures of society rather than of the person. Psychological problems may be rooted in the social ills of society, such as poverty, lack of economic opportunity, rapidly changing social values and morals, and racial and gender discrimination. This view of abnormal behaviour will be addressed further later in this chapter.

[1]Because the medical model is not the only way of viewing abnormal behaviour patterns, we adopt a more neutral language in this text in describing abnormal behaviour patterns. For example, we often refer to "features" or "characteristics" of abnormal behaviour patterns or psychological disorders rather than "symptoms." But our adoption of nonmedical jargon is not an absolute rule. In some cases, there may be no handy substitutes for terms that derive from the medical model, such as the term *remission* or the reference to patients in mental hospitals as "mental patients." In other cases we may use terms such as *disorder*, *therapy*, and *treatment* because they are commonly used by psychologists who "treat" "mental disorders" with psychological "therapies."

A CLOSER LOOK

The Homeless in Canada: Still Waiting for True Community Mental Health Care

The number of homeless people across Canada has more than doubled in the last decade. Projections state that nightly, tens of thousands of Canadians are homeless (Hwang, 2001). Although difficult to measure, it is estimated that between 20% and 35% of homeless people need treatment for their mental health problems (R. N. Golden et al., 1999; Milstone, 1995). A year-long study of Toronto homeless shelter users found that about one third (31%) of homeless people were experiencing both psychological and substance-use disorders, while roughly equal numbers were experiencing either a psychological disorder (19%) or a substance-use disorder (21%) (Tolomiczenko & Goering, 1998). In 5% of the cases, a prevalence of severe psychological disorder, primarily schizophrenia, was found.

FACING THE CHALLENGE OF MENTAL HEALTH PROMOTION FOR HOMELESS PEOPLE

While it's true that many provincial psychiatric hospitals closed their doors and general hospitals reduced the number of psychiatric beds beginning in the 1990s, problems arose when provinces failed to adequately fund or integrate community support services intended to replace the need for long-term hospitalization (Muckle & Turnbull, 2006). Far too often, homeless people with a range of psychological problems fell through the cracks of the mental health and social service systems and were left largely to fend for themselves. In particular, there has been an ongoing lack of available housing, transitional care facilities, and effective case management for homeless Canadians who have psychological disorders and addictions (Kirby & Keon, 2006). To compound the problem, not only is there limited access to adequate housing and community support services, magnifying the length and severity of a homeless person's mental health problems (R. N. Golden et al., 1999; Social Services Ottawa, 1999; H. L. Stuart & Arboleda-Florez, 2000), but also large numbers of those who suffer from medical ailments are typically forced to endure increased hospital stays and treatment costs (Podymow, Turnbull, Tadic, & Muckle, 2006).

DEINSTITUTIONALIZATION: THE FINAL PHASE

At long last, we may be on the verge of a new era in Canadian mental health care. In their comprehensive report, *Out of the Shadows at Last*, senators Kirby and Keon (2006) described how a continuum of mental health care could be made available to every Canadian, including some of our most vulnerable members of society—homeless Canadians with psychological disorders. Based on the recommendations of Kirby and Keon's report, the Canadian Mental Health Care Commission developed a national strategy to oversee the delivery of mental health services, such as integrated, seamless access to personalized and culturally sensitive care through community mental health-care services and supports (Kirby & Keon, 2006). Such a system may include, but would not be limited to, the following: access to non-health services including safe and adequate housing, employment assistance, and adequate income; opportunities to rely on peer support and develop meaningful social relationships; opportunities to foster self-respect and a sense of being an accepted member of society (Kirby & Keon, 2006; L. B. Russell, Hubley, & Palepu, 2005); and harm reduction programs that target alcohol and drug abuse (Everett, 2002; Turnbull, Muckle, & Tadic, 2004; Wasylenki, 2001).

Paul W. Leibhardt

Homeless with mental health issues. A multifaceted effort is needed to meet the needs of the psychiatric homeless population, including access to affordable housing and to medical, drug and alcohol, and mental health treatment, as well as other social services. Far too often, homeless people with a range of psychological problems fall through the cracks of the mental health and social service systems, and are left largely to fend for themselves.

According to the more radical sociocultural theorists, such as the psychiatrist Thomas Szasz, mental illness is no more than a myth—a label used to stigmatize and subjugate people whose behaviour is socially deviant (Szasz, 1961). Szasz argues that so-called mental illnesses are really "problems in living," not diseases in the sense that influenza, hypertension, and cancer are. Nearly half a century later, Canadian psychiatrist Gordon Warme (2006) has rekindled these sentiments by claiming that biological explanations of abnormal behaviour are still unconvincing and that "most, if not all, of the effects of psychiatry are magical" (p. 2).

Sociocultural theorists maintain that once the label of "mental illness" is applied, it is very difficult to remove. The label also affects other people's responses to the "patient." Mental patients are stigmatized and socially degraded. Job opportunities may be denied, friendships may dissolve, and the "patient" may become increasingly alienated from society. Szasz argues that treating people as mentally ill strips them of their dignity because it denies them responsibility for their own behaviour and choices. He claims that troubled people should be encouraged to take more responsibility for managing their lives and solving their problems (Szasz, 1961).

Although not all sociocultural theorists subscribe to Szasz's more radical views, they alert us to consider the importance of taking sociocultural factors relating to gender, race, ethnicity, lifestyle, and social ills such as poverty and discrimination into account in understanding people whose behaviour leads them to be perceived as mentally ill or abnormal. It should come as no surprise that the effects of stigma and discrimination remain a daily experience for many Canadians diagnosed with psychological or addictive disorders—a topic we'll come back to in Chapter 2, "Assessment, Classification, and Treatment of Abnormal Behaviour."

REVIEW IT

Historical Perspectives on Abnormal Behaviour

- **How have views about abnormal behaviour changed over time?** Ancient societies attributed abnormal behaviour to divine or supernatural forces. There were some authorities in ancient times, such as the Greek physicians Hippocrates and Galen, who believed that abnormal behaviour reflected natural causes. In medieval times, belief in possession held sway, and exorcists were used to rid people who behaved abnormally of the evil spirits that were believed to possess them. The 19th-century German physician Wilhelm Griesinger argued that abnormal behaviour was caused by diseases of the brain. He and another German physician who followed him, Emil Kraepelin, were influential in the development of the modern medical model, which likens abnormal behaviour patterns to physical illnesses.
- **How has the treatment of people with psychological disorders changed over time?** Asylums, or madhouses, began to crop up throughout Europe in the late 15th and early 16th centuries. Conditions in these asylums were dreadful, and in some, such as Bethlehem Hospital in England and 19th-century hospitals in Ontario, a circus atmosphere prevailed. With the rise of moral therapy in the 19th century, largely spearheaded by the Frenchmen Jean-Baptiste Pussin and Philippe Pinel, conditions in mental hospitals improved. Proponents of moral therapy believed that mental patients could be restored to functioning if they were treated with dignity and understanding. The decline of moral therapy in the latter part of the 19th century led to a period of apathy and to the belief that the "insane" could not be successfully treated. Conditions in mental hospitals deteriorated, and they offered little more than custodial care.

  Not until the middle of the 20th century did public outrage and concern about the plight of mental patients mobilize a change in government policy. As a consequence, psychiatric services were commonly relocated to general hospital psychiatric units as an alternative to long-term hospitalization. This movement toward deinstitutionalization was spurred by the introduction of psychoactive drugs, called *phenothiazines*, that curbed the more flagrant features of schizophrenia.
- **What are the roles of psychiatric hospitals and general hospital psychiatric units today**? The hospitals provide a structured treatment environment for people in acute crisis and for those who are unable to adapt to community living. Mental health care in a hospital today aims to restore patients to community functioning. Community mental health-care services are meant to provide continuing care outside of the hospital to people with psychological disorders.
- **What is deinstitutionalization and how successful has it been**? Deinstitutionalization is the policy of reducing the need for long-term hospitalization of mental patients by shifting care to community-based settings. Although deinstitutionalization has greatly reduced the population of provincial psychiatric hospitals, it has not yet fulfilled its promise of restoring people with psychological disorders to a reasonable quality of life in the community. One example of the challenges yet to be met is the number of homeless people with psychological and substance-abuse problems who are not receiving adequate care in the community.

CURRENT PERSPECTIVES ON ABNORMAL BEHAVIOUR

Biological Perspectives on Abnormal Behaviour

The medical model, inspired by physicians from Hippocrates through Kraepelin, remains a powerful force in contemporary understanding of abnormal behaviour, representing a biological perspective. We prefer to use the term *biological perspectives* rather than *medical model* to refer to approaches that emphasize the role of biological factors in explaining abnormal behaviour and the use of biologically based components in treating psychological disorders.

Knowledge of the biological underpinnings of abnormal behaviour has grown rapidly in recent years, and exciting advances are being made in genetics, epigenetics, and stem cell research that are taking us to an entirely new level of understanding of abnormal behaviour. We know that other biological factors, especially the functioning of the nervous system, are also involved in many forms of abnormal behaviour. To better understand the role of biological systems in abnormal behaviour patterns, we first need to learn the basics of how molecular structures alter and regulate cellular function, how the nervous system is organized, and how nerve cells communicate with each other.

GENETICS Heredity plays an important role in human behaviour. From a biological perspective, heredity is described in terms of genetics—the study of how traits are passed down from one generation to the next and how these traits affect the way we look, function, and behave. We'll begin this section by looking at the latest groundbreaking research on the role genetics plays in the origin of abnormalities.

DNA Deoxyribonucleic acid is a double-strand complex molecule of helical structure that contains the genetic instructions for building and maintaining living organisms.

proteins Organic compounds consisting of amino acids that perform most life functions and make up the majority of cellular structures.

epigenome The sum total of inherited and acquired molecular variations to the genome that lead to changes in gene regulation without changing the DNA sequence of the genome itself.

epigenetics The study of the heritable and acquired changes in gene regulation (phenotype) that occur without affecting DNA sequence (genotype).

gene expression The process by which a gene sequence becomes activated ("turned on") and is translated into the proteins that determine the structure and functions of body cells.

gene silencing The process of preventing or suppressing ("switching off") a gene sequence from being translated into proteins.

The Human Genome A genome comprises all the genetic material encoded in the **DNA** (deoxyribonucleic acid) located in the nucleus of cells in living organisms (see Figure 1.1). DNA—the long, complex molecular structures that make up the genome—is characterized by essential organic compounds that determine our unique genetic code.

In each of our cells, there are an estimated 2.8 billion of the base-pair compounds that form the familiar DNA double-helix structures of the human genome.

Most of our genes contain the cellular instructions for combining 20 standard amino acids to build a wide array of **proteins** (35 000 or so). Each protein is a unique combination of amino acids, and every cell in our body is constructed and maintained by proteins. For example, different proteins are used to build everything from bones, muscles, and organs to brain cells. In addition, all biological processes—metabolism, immune function, muscle contraction, and neurotransmission—rely on proteins.

Genetic errors occur when the number or order of the DNA base pairs is wrong. When the DNA sequence is interrupted, the result can be an alteration or breakdown of a cell's normal protein production, maintenance, and repair processes. If these errors are serious enough, bodily structures and functions can become abnormal or fail.

Epigenetics Recent genetics research has revealed that DNA errors tell only one part of the story when it comes to explaining the causes of human diseases and disorders. Each of your body's cells contains an identical DNA code. But if each cell carries the same genetic code (your genotype), how is it that they come to differentiate into specialized cell types (your phenotype), such as muscle, skin, or brain cells? The answer seems to be found in a molecular structure that overlays the genome, called the **epigenome** (Callinan & Feinberg, 2006).

Epigenetics research, particularly in recent years (Weinhold, 2006), has shown that the epigenome plays a vital role in gene regulation through two key means: **gene expression** and **gene silencing**. Under normal circumstances, some genes are expressed (turned

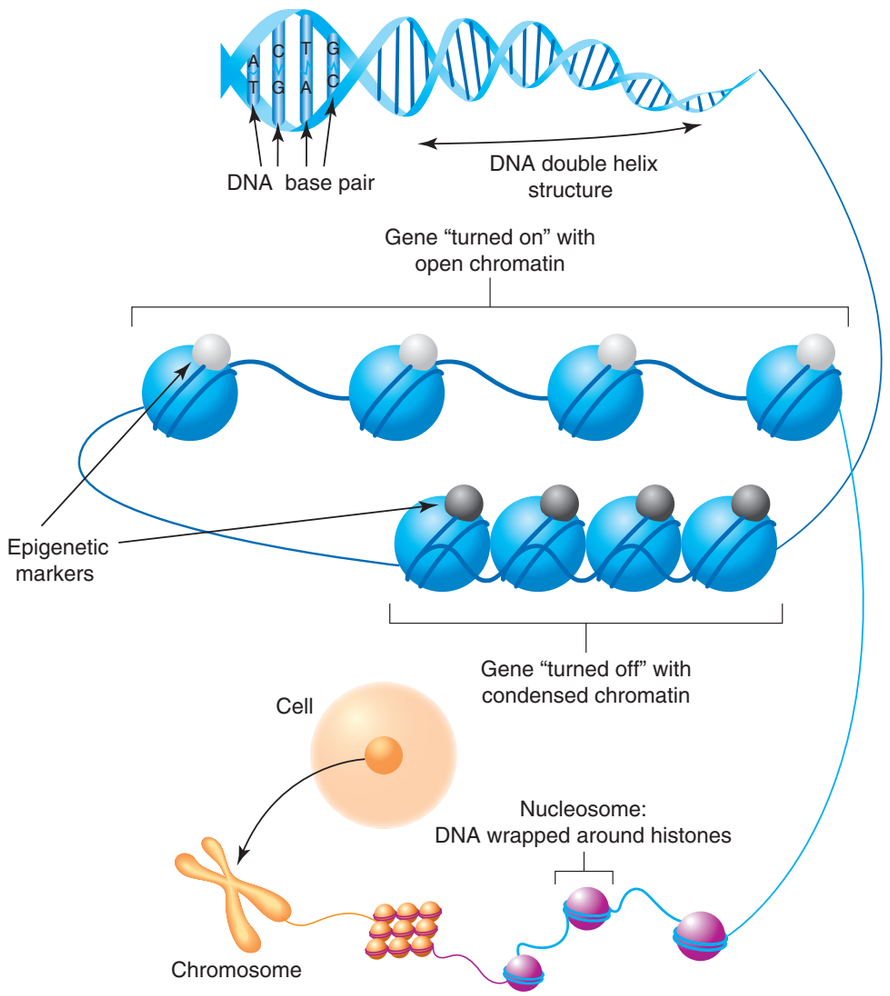


FIGURE 1.1 The genome and the epigenome. The genome is all the hereditary information or all the information necessary to build and maintain life. Each cell contains the same genetic code. The genome is actually made up of chromosomes, found in each nucleus of each cell, that are further segmented into genes which are then wrapped around histones. Gene-coiled histones are called nucleosomes, and groups of these look like beads on a necklace. Along the nucleosomes are epigenetic markers which actually regulate the gene—in gene expressions or gene silencing. It is in this process that epigenetic errors happen and interfere with normal gene regulation.

on) while others are silenced (turned off). So, for example, although a person's muscle cells and brain cells both have the same genome (DNA sequence), it is each cell's unique epigenome that dictates which pattern of genes within that cell will be activated. Simply put, we could say that it is the epigenome that causes "brain" genes to be active in brain cells but silenced in muscle cells and vice versa. The epigenome also regulates hundreds of other critically precise tasks in our cells.

In the area of mental health, Canadian researchers are at the forefront of investigating the role epigenetics plays in the origin and course of psychological disorders such as schizophrenia, bipolar disorders, and Alzheimer's disease (Schumacher & Petronis, 2006). Epigenetics has suddenly provided scientists with a significant reinterpretation of the interplay between genes and the environment. We are just now beginning to understand what may well be the next revolution in the theory and treatment of human disease and disorders.

Stem Cells Stem cell research has recently opened up new avenues for studying the development and treatment of various conditions such as schizophrenia, autism, and bipolar disorder. Stem cells, found in all multicellular organisms, are biological cells that can divide (through mitosis) and differentiate into diverse specialized cell types and can self-renew to produce more stem cells. Stem cells can now be artificially grown and

transformed through cell culture into specialized cell types with characteristics consistent with cells of various tissues, such as muscles or nerves.

The inability to actually watch living human brain cells in action has hampered scientists in their efforts to understand psychiatric disorders. However, researchers have identified a promising new approach that may revolutionize the study and treatment of conditions. A team led by researchers at the Salk Institute for Biological Studies in La Jolla, California, took skin cells from a patient with schizophrenia, turned them into adult stem cells, and then grew those stem cells into neurons (Brennand et al., 2011). The resulting tangle of brain cells gave neuroscientists their first real-time glimpse of human schizophrenia at the cellular level.

Scientists have used the disease-in-a-dish strategy to gain insight into sickle-cell anemia and heart arrhythmias. But the Salk team, led by neuroscientist Fred H. Gage, was the first to apply the approach to a genetically complex neuropsychiatric disorder. The group found that neurons derived from patients with schizophrenia formed fewer connections with one another than those derived from healthy patients; they also linked the deficit to the altered expression of nearly 600 genes, four times as many as had been previously implicated. The approach may eventually improve therapy, allowing psychiatrists to screen a variety of drugs to find the one that would be most effective for each patient.

THE NERVOUS SYSTEM Perhaps you would not be nervous if you did not have a nervous system, but even calm people have nervous systems. The nervous system is made up of nerve cells called **neurons**. Neurons communicate with one another, or transmit "messages." These messages somehow account for events as diverse as sensing an itch from a bug bite; co-ordinating a figure skater's vision and muscles; composing a symphony; solving an architectural equation; and, in the case of hallucinations, hearing or seeing things that are not really there.

neurons Nerve cells.

soma Cell body.

dendrites Root-like structures at the end of a neuron that receive nerve impulses from other neurons.

axon Long, thin part of a neuron along which nervous impulses travel.

Every neuron has a cell body, or **soma**, dendrites, and an axon (see Figure 1.2). The cell body contains the nucleus of the cell and metabolizes oxygen to carry out its work. Short fibres called **dendrites** project from the cell body to receive messages from adjoining neurons. Each neuron has a single **axon** that projects trunk-like from

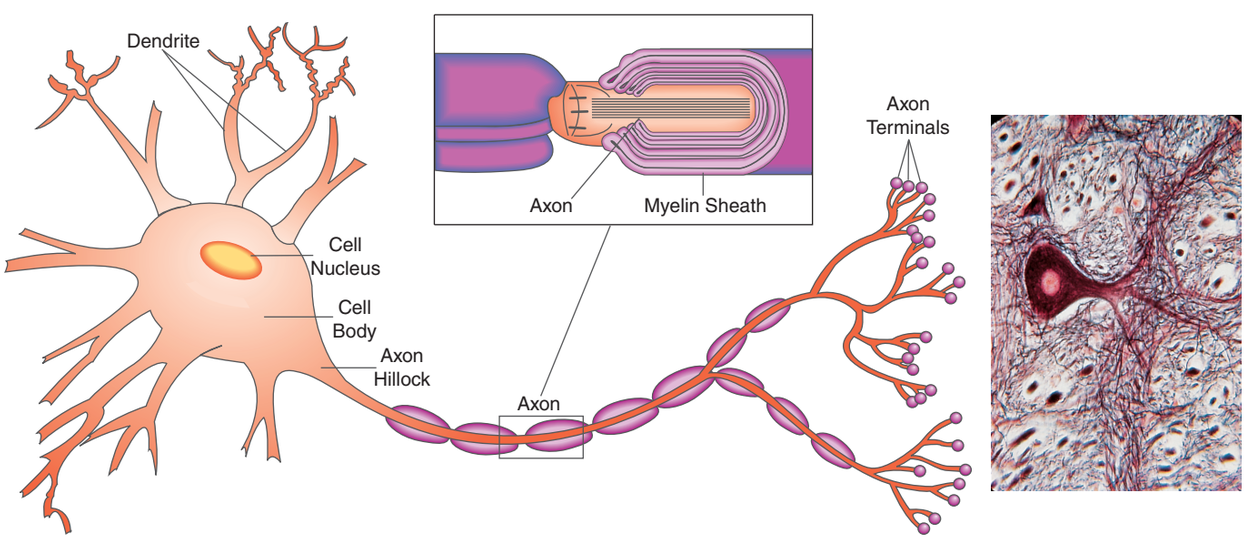


FIGURE 1.2 Anatomy of a neuron.
Neurons typically consist of cell bodies (or somas), dendrites, and one or more axons. The axon of this neuron is wrapped in a myelin sheath, which insulates it from the bodily fluids surrounding the neuron and facilitates transmission of neural impulses (messages that travel within the neuron).

the cell body. Axons can extend over a metre if they are conveying messages between the toes and the spinal cord. They may branch and project in various directions. Axons terminate in small branching structures that are aptly termed **terminals**. Swellings called **knobs** occupy the tips of axon terminals. Neurons convey messages in one direction, from the dendrites or cell body along the axon to the axon terminals. The messages are then conveyed from terminal knobs to other neurons, muscles, or glands.

Neurons transmit messages to other neurons by means of chemical substances called **neurotransmitters**. Neurotransmitters induce chemical changes in receiving neurons. These changes cause axons to conduct the messages in electrical form.

The junction between a transmitting neuron and a receiving neuron is termed a **synapse**. A transmitting neuron is termed *presynaptic*. A receiving neuron is said to be *postsynaptic*. A synapse consists of an axon terminal from a transmitting neuron, a dendrite of a receiving neuron, and a small fluid-filled gap between the two called the *synaptic cleft*. The message does not jump the synaptic cleft like a spark. Instead, axon terminals release neurotransmitters into the cleft like myriad ships casting off into the seas (see Figure 1.3).

Each kind of neurotransmitter has a distinctive chemical structure. It will fit only into one kind of harbour or **receptor site** on the receiving neuron. Consider the analogy of a lock and key. Only the right key (neurotransmitter) operates the lock, causing the postsynaptic neuron to forward the message.

Once released, some molecules of a neurotransmitter reach port at receptor sites of other neurons. "Loose" neurotransmitters may be broken down in the synaptic clefts by enzymes or be reabsorbed by the axon terminal (a process termed *reuptake*) so as to prevent the receiving cell from continuing to fire.

Malfunctions in neurotransmitter systems in the brain are linked to various kinds of mental health problems. For example, excesses and deficiencies of the neurotransmitter **norepinephrine** have been connected with mood disorders (see Chapter 4, "Mood Disorders and Suicide") and eating disorders (see Chapter 8, "Feeding and Eating Disorders and Sleep–Wake Disorders"). **Alzheimer's disease**, which involves the progressive loss of memory and cognitive functioning, is associated with reductions in the levels in the brain of the

terminals In neuropsychology, the small branching structures found at the tips of axons.

knobs Swollen endings of axon terminals.

neurotransmitters Chemical substances that serve as a type of messenger by transmitting neural impulses from one neuron to another.

synapse Junction between the terminal knob of one neuron and the dendrite or soma of another, through which nerve impulses pass.

receptor site Part of a dendrite on the receiving neuron that is structured to receive a neurotransmitter.

norepinephrine Type of neurotransmitter of the catecholamine class.

Alzheimer's disease Progressive brain disease characterized by gradual loss of memory and intellectual functioning, personality changes, and eventual loss of ability to care for oneself.

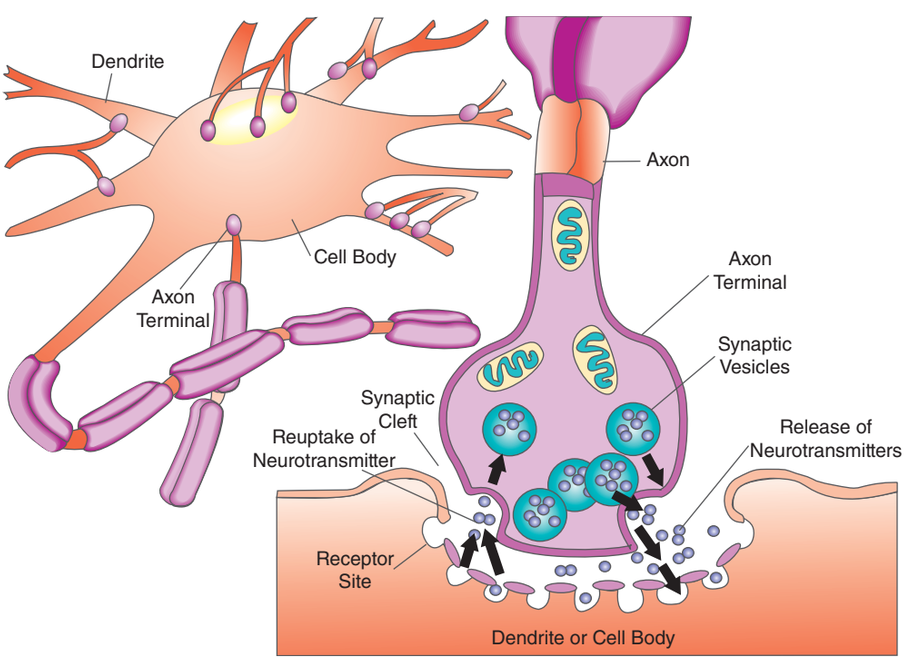


FIGURE 1.3 Transmission of neural impulses across the synapse.
Neurons transmit messages or neural impulses across synapses, which consist of the axon terminal of the transmitting neuron; the gap, or synaptic cleft, between the neurons; and the dendrite of the receiving neuron. The "message" consists of neurotransmitters that are released by synaptic vesicles (sacs) into the synaptic cleft and taken up by receptor sites on the receiving neuron. Finally, neurotransmitters are broken down and reabsorbed by the axon terminal (reuptake) to be recycled.

acetylcholine Type of neurotransmitter involved in the control of muscle contractions. Abbreviated *ACh*.

dopamine Neurotransmitter of the catecholamine class that is believed to play a role in schizophrenia.

neurotransmitter **acetylcholine**. Irregularities involving excessive availability of the neurotransmitter **dopamine** appear to be involved in schizophrenia (see Chapter 10, "Schizophrenia Spectrum and Other Psychotic Disorders"). **Serotonin**, another neurotransmitter, is linked to various psychological disorders, including anxiety disorders (see Chapter 3, "Anxiety, Obsessive-Complusive, and Trauma- and Stressor-Related Disorders"), mood disorders (see Chapter 4), sleep disorders (see Chapter 8), and feeding and eating disorders (see Chapter 8). Although neurotransmitters are believed to play a role in various psychological disorders, precise causal relationships have not yet been determined.

REVIEW IT

Biological Perspectives

- **What is the distinguishing feature of the biological perspectives on abnormal behaviour?** Biological perspectives focus on the biological underpinnings of abnormal behaviour, including the roles of genetics, neurotransmitter functioning, and brain abnormalities and defects.

serotonin Type of neurotransmitter, imbalances of which have been linked to mood disorders and anxiety.

Psychological Perspectives on Abnormal Behaviour

Researchers are investigating whether the combination of psychological and drug treatments for such problems as depression, anxiety disorders, and substance-abuse disorders may increase the therapeutic benefits of either of the two approaches alone. Although Canadian psychiatry has become increasingly medicalized in recent years, some within the psychiatric community have warned their colleagues not to overlook the role of psychological factors in explaining and treating mental health problems (Leszcz, MacKenzie, el-Guebaly, Atkinson, & Wiesenthal, 2002).

psychoanalytic theory Theoretical model of personality developed by Freud. Also called *psychoanalysis*.

At about the time biological models of abnormal behaviour were beginning to achieve prominence with the contributions of Kraepelin, Griesinger, and others, another approach to understanding the bases of abnormal behaviour began to emerge. This approach emphasized the psychological roots of abnormal behaviour and was most closely identified with the work of Freud. Over time other psychological models would emerge from the behaviourist, humanistic-existential, and cognitivist traditions. Let's begin our study of psychological perspectives with Freud's contribution and the development of psychodynamic models.

Science Photo Library

Sigmund Freud at about the age of 30.

PSYCHODYNAMIC MODELS Psychodynamic theory is based on the contributions of Sigmund Freud and his followers. The psychodynamic model espoused by Freud, called **psychoanalytic theory**, is based on the belief that psychological problems are derived from unconscious psychological conflicts, which can be traced to childhood. Freud held that much of our behaviour is driven by unconscious motives and conflicts of which we are unaware. These underlying conflicts revolve around primitive sexual and aggressive instincts or drives and the need to keep these primitive impulses out of direct awareness. Why? Because awareness of these primitive impulses, including murderous urges and incestuous impulses, would flood the conscious self with crippling anxiety.

The Structure of the Mind Freud's clinical experiences led him to conclude that the mind is like an iceberg (see Figure 1.4). Only the tip of an iceberg is visible above the surface of the water. The great mass of the iceberg lies below the surface, darkening the deep. Freud came to believe that people, similarly, perceive but a few of the ideas, wishes, and impulses that dwell within them and determine their behaviour. Freud held that the larger part of the mind, which includes our deepest wishes, fears, and instinctual urges, remains below the surface of consciousness.

Freud labelled the region that corresponds to our present awareness the **conscious** part of the mind. The regions that lie beneath the surface of awareness were labelled the **preconscious** and the **unconscious**.

In the **preconscious** mind, memories of experience can be found that are not in awareness but can be brought into awareness with focus. Your telephone number, for example, remains in the preconscious until you focus on it. The **unconscious** mind, the largest part of the mind, remains shrouded in mystery. Its contents can be brought to awareness only with great difficulty, if at all. Freud believed the unconscious is the repository of biological drives or instincts such as sex and aggression.

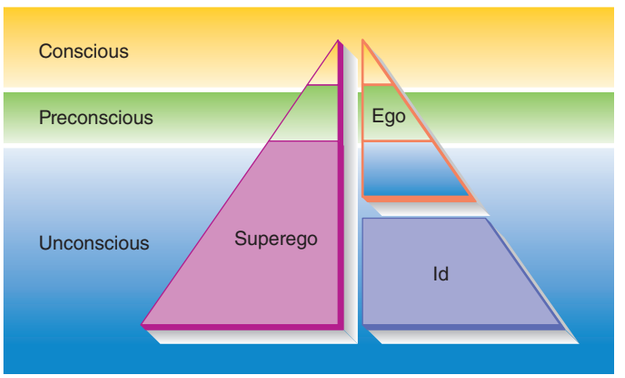


FIGURE 1.4 The parts of the mind, according to Sigmund Freud.
According to psychodynamic theory, the mind is akin to an iceberg in that only a small part of it rises to conscious awareness at any moment in time. Although material in the preconscious mind may be brought into consciousness by focusing our attention on it, the impulses and ideas in the unconscious tend to remain veiled in mystery.

The Structure of Personality According to Freud's **structural hypothesis**, the personality is divided into three mental entities or **psychic** structures: the id, ego, and superego. Psychic structures cannot be seen or measured directly, but their presence is suggested by observable behaviour and expressed in thoughts and emotions.

The **id** is the only psychic structure present at birth. It is the repository of our baser drives and instinctual impulses, including hunger, thirst, sex, and aggression. The id, which operates completely in the unconscious, was described by Freud as "a chaos, a cauldron of seething excitations" (1933/1964, p. 73). The id follows the **pleasure principle**. It demands instant gratification of instincts without consideration of social rules or customs or the needs of others. It operates by **primary process thinking**, which is a mode of relating to the world through imagination and fantasy. This enables the id to achieve gratification by conjuring up a mental image of the object of desire.

During the first year of life, the child discovers that its every demand is not instantly gratified. It must learn to cope with delay of gratification. The **ego** develops during this first year to organize reasonable ways of coping with frustration. Standing for "reason and good sense" (Freud, 1933/1964, p. 76), the ego seeks to curb the demands of the id and to direct behaviour in keeping with social customs and expectations. Gratification can thus be achieved, but not at the expense of social disapproval. The id floods your consciousness with hunger pangs. Were it to have its way, the id might also prompt you to wolf down any food at hand or even to swipe someone else's plate. But the ego creates the ideas of walking to the refrigerator, making yourself a sandwich, and pouring a glass of milk.

The ego is governed by the **reality principle**. It considers what is practical and possible, as well as the urgings of the id. The ego engages in **secondary process thinking**—the remembering, planning, and weighing of circumstances that permit a compromise between the fantasies of the id and the realities of the world outside. The ego lays the groundwork for the development of the conscious sense of the **self**.

During middle childhood, the **superego** develops. The moral standards and values of parents and other key people become internalized through a process of **identification**. The superego operates according to the **moral principle**; it demands strict adherence to moral standards. The superego represents the moral values of an ideal self, called the **ego ideal**. It also serves as a conscience or internal moral guardian that monitors the ego and passes judgment on right and wrong. It metes out punishment in the form of guilt and shame when it finds that the ego has failed to adhere to the superego's moral standards. Ego stands between the id and the superego. It endeavours to satisfy the cravings of the id without offending the moral standards of the superego.

Freud believed that there is a thin line between normal and abnormal. Both normal and abnormal behaviour are motivated or driven by irrational drives of the id. The difference may be largely a matter of degree. Normality is a matter of the balance of energy among the psychic structures of id, ego, and superego. In normal people, the ego has the

conscious Aware.

preconscious In psychodynamic theory, descriptive of material that lies outside of present awareness but that can be brought into awareness by focusing attention. See also *unconscious*.

unconscious (1) In psychodynamic theory, pertaining to impulses or ideas that are not readily available to awareness, in many instances because they are kept from awareness by means of *repression*. (2) Also in psychodynamic theory, the part of the mind that contains repressed material and primitive urges of the id. (3) More generally, a state of unawareness or loss of consciousness.

structural hypothesis In Freud's theory, the belief that the clashing forces within the personality could be divided into three psychic structures: the id, the ego, and the superego.

psychic (1) Relating to mental phenomena. (2) A person who claims to be sensitive to supernatural forces.

id In psychodynamic theory, the unconscious psychic structure that is present at birth. The id contains instinctual drives and is governed by the pleasure principle.

pleasure principle In psychodynamic theory, the governing principle of the id, involving the demands for immediate gratification of instinctual needs.

primary process thinking In psychodynamic theory, the mental process in infancy by which the id seeks gratification of primitive impulses by means of imagining it possesses what it desires. Thinking that is illogical and magical, and fails to discriminate between reality and fantasy.

ego In psychodynamic theory, the psychic structure corresponding to the concept of the self. The ego is governed by the reality principle and is responsible for finding socially acceptable outlets for the urgings of the id. The ego is characterized by the capacity to tolerate frustration and delay gratification.

reality principle In psychodynamic theory, the governing principle of the ego that involves consideration of what is socially acceptable and practical in gratifying needs.

secondary process thinking In psychodynamic theory, the reality-based thinking processes and problem-solving activities of the ego.

self Centre of consciousness that organizes sensory impressions and governs one's perceptions of the world. The sum total of a person's thoughts, sensory impressions, and feelings.

superego In psychodynamic theory, the psychic structure that represents the incorporation of the moral values of the parents and important others and floods the ego with guilt and shame when it falls short of meeting those standards. The superego is governed by the moral principle and consists of two parts: the conscience and the ego ideal.

identification (1) In psychodynamic theory, the process of incorporating the personality or behaviour of others. (2) In social learning theory, a process of imitation by which children acquire behaviours similar to those of role models.

moral principle In psychodynamic theory, the principle that governs the superego to set moral standards and enforce adherence to them.

ego ideal In Freud's view, the configuration of higher social values and moral ideals embodied in the superego.

strength to control the instincts of the id and to withstand the condemnation of the superego. The presence of acceptable outlets for the expression of some primitive impulses, such as the expression of mature sexuality in marriage, decreases the pressures within the id and at the same time lessens the burdens of the ego in repressing the remaining impulses. Being reared by reasonably tolerant parents might prevent the superego from becoming overly harsh and condemnatory.

Defence Mechanisms Although part of the ego rises to consciousness, some of its activity is carried out unconsciously. In the unconscious, the ego serves as a kind of gatekeeper or censor that screens impulses from the id. It uses **defence mechanisms** (psychological defences) to prevent socially unacceptable impulses from rising into consciousness. If it were not for these defence mechanisms, the darkest sins of our childhoods, the primitive demands of our ids, and the censures of our superegos might disable us psychologically. **Repression**, or motivated forgetting (banishment of unacceptable ideas or motives to the unconscious), is considered the most basic of the defence mechanisms. A number of these defence mechanisms are described in Table 1.1.

The use of defence mechanisms to cope with feelings like anxiety, guilt, and shame is considered normal. These mechanisms enable us to constrain impulses from the id as we go about our daily business. Freud noted that slips of the tongue and ordinary forgetfulness could represent hidden motives that are kept out of consciousness by repression. If a friend means to say "I hear what you're saying" but it comes out "I hate what you're saying," perhaps the friend is expressing a repressed emotion. If a lover storms out in anger but forgets his umbrella, perhaps he is unconsciously creating an excuse for returning. Defence mechanisms

TABLE 1.1

Major Defence Mechanisms in Psychodynamic Theory

Type of Defence Mechanism	Description	Example
Repression	Expulsion from awareness of unacceptable ideas or motives.	A person remains unaware of harbouring hateful or destructive impulses toward others.
Regression	The return of behaviour that is typical of earlier stages of development.	Under stress, a university student starts biting his nails or becomes totally dependent on others.
Displacement	The transfer of unacceptable impulses away from threatening persons toward safer or less threatening objects.	A worker slams a door after his boss chews him out.
Denial	Refusal to recognize a threatening impulse or desire.	A person harshly rebukes his or her spouse but denies feeling angry.
Reaction formation	Behaving in a way that is the opposite of one's true wishes or desires in order to keep these repressed.	A sexually frustrated person goes on a personal crusade to stamp out indecency.
Rationalization	The use of self-justifications to explain unacceptable behaviour.	A woman says, when asked why she continues to smoke, "Cancer doesn't run in my family."
Projection	Imposing one's own impulses or wishes onto another person.	A sexually inhibited person misinterprets other people's friendly approaches as sexual advances.
Sublimation	The channelling of unacceptable impulses into socially constructive pursuits.	A person channels aggressive impulses into competitive sports.

may also give rise to abnormal behaviour, however. The person who regresses to an infantile state under pressures of enormous stress is clearly not acting adaptively to the situation.

Perpetual vigilance and defence take their toll. The ego can weaken and, in extreme cases, lose the ability to keep a lid on the id. **Psychosis** results when the urges of the id spill forth into consciousness, untempered by an ego that either has been weakened or is underdeveloped. The fortress of the ego is overrun, and the person loses the ability to distinguish between fantasy and reality. Behaviour becomes detached from reality. Psychoses are characterized, in general, by more severe disturbances of functioning than neuroses, by the appearance of bizarre behaviour and thoughts, and by faulty perceptions of reality, such as hallucinations ("hearing voices" or seeing things that are not present). Speech may become incoherent and there may be bizarre posturing and gestures.

Freud equated psychological health with the abilities to love and to work. The normal person can care deeply for other people, find sexual gratification in an intimate relationship, and engage in productive work. Other impulses must be channelled (sublimated) into socially productive pursuits, such as work, enjoyment of art or music, or creative expression. When some impulses are expressed directly and others are sublimated, the ego has a relatively easy time of it repressing those that remain in the boiling cauldron.

defence mechanisms In psychodynamic theory, the reality-distorting strategies used by the ego to shield itself from conscious awareness of anxiety-evoking or troubling material.

repression In psychodynamic theory, a type of defence mechanism involving the ejection from awareness of anxiety-provoking ideas, images, or impulses, without the conscious awareness that one has done so.

psychosis Type of major psychological disorder in which people show impaired ability to interpret reality and difficulties in meeting the demands of daily life. Schizophrenia is a prominent example of a psychotic disorder. Plural: *psychoses*.

Other Psychodynamic Theorists Freud left a rich intellectual legacy that has stimulated the thinking of many theorists. Psychodynamic theory has been shaped over the years by the contributions of other theorists who are sometimes referred to collectively as **neo-Freudians** (Carl Jung, Alfred Adler, Karen Horney, and Harry Stack Sullivan). They shared certain central tenets in common with Freud, such as the belief that behaviour reflects unconscious motivation, inner conflict, and the operation of defensive responses to anxiety. They tended to de-emphasize the roles of basic instincts such as sex and aggression, however, and placed greater emphasis on roles for conscious choice, self-direction, and creativity.

neo-Freudians Term used to describe the "second generation" of theorists who followed in the Freudian tradition. On the whole, neo-Freudians (such as Jung, Adler, Horney, and Sullivan) placed greater emphasis on the importance of cultural and social influences on behaviour and lesser importance on sexual impulses and the functioning of the id.

Evaluating Psychodynamic Perspectives Psychodynamic theory has had a pervasive influence not only on concepts of abnormal behaviour but more broadly on art, literature, philosophy, and the general culture. It has focused attention on our inner lives—our dreams, fantasies, and hidden motives. People unschooled in Freud habitually look for the symbolic meanings of each other's slips of the tongue and assume that abnormalities can be traced to early childhood. Terms like *ego* and *repression* have become commonplace, although their everyday meanings do not fully overlap with those intended by Freud.

One of the major contributions of the psychodynamic model was the increased awareness that people may be motivated by hidden drives and impulses of a sexual or aggressive nature. Freud's beliefs about childhood sexuality were both illuminating and controversial. Before Freud, children were perceived as pure innocents, free of sexual desire. Freud recognized, however, that young children, even infants, seek pleasure through stimulation of the oral and anal cavities and the phallic region.

Yet for all the criticism and skepticism directed at psychoanalytic theory, new research shows support for some of Freud's specific predictions and claims. For example, modern cognitive psychology has confirmed that through repetition, our behaviour can become automatic and as a consequence we perform many everyday tasks with minimal conscious awareness (Power, 2000). Neuropsychological studies are also helping us to better understand conscious and unconscious mental processes and how early life experiences can influence one's susceptibility to abnormal behaviour (D. J. Stein, Solms, & van Honk, 2006).

BEHAVIOURAL PERSPECTIVES

The psychodynamic models of Freud and his followers were the first major psychological theories of abnormal behaviour, but other relevant psychologies were also taking shape early in the 20th century. Among the most important was the behavioural perspective, or **behaviourism**, which is identified with contributions by the Russian physiologist Ivan Pavlov (1849–1936), the discoverer of the conditioned reflex, and the American psychologists John B. Watson (1878–1958) and B. F. Skinner (1904–1990). The behavioural perspective focuses on the role of learning in explaining both normal and abnormal behaviour. From a learning perspective, abnormal

behaviourism School of psychology that defines psychology as the study of observable or overt behaviour and focuses on investigating the relationships between stimuli and responses.

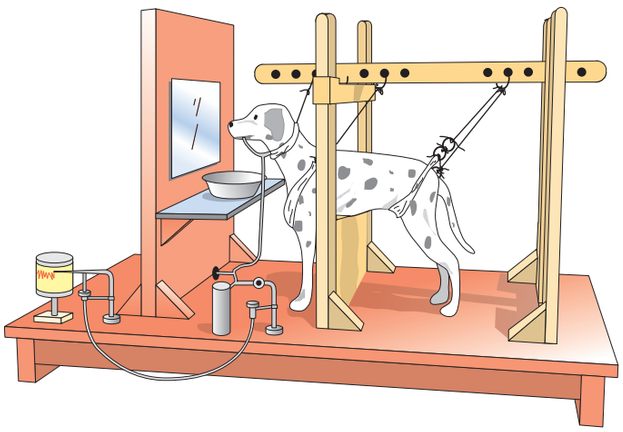


FIGURE 1.5 The apparatus used in Ivan Pavlov's experiments on conditioning.
Pavlov used an apparatus such as this to demonstrate the process of conditioning. To the left is a two-way mirror, behind which a researcher rings a bell. After the bell is rung, meat is placed on the dog's tongue. Following several pairings of the bell and the meat, the dog learns to salivate in response to the bell. The animal's saliva passes through the tube to a vial, where its quantity may be taken as a measure of the strength of the conditioned response.

behaviour represents the acquisition or learning of inappropriate, maladaptive behaviours. Abnormal behaviour can also be described in terms of not learning or underlearning appropriate, adaptive behaviours.

From the medical and psychodynamic perspectives, abnormal behaviour is symptomatic, respectively, of underlying biological or psychological problems. From the behavioural perspective, however, abnormal behaviour need not be symptomatic of anything. The abnormal behaviour itself is the problem. Abnormal behaviour is regarded as learned in much the same way as normal behaviour. Why, then, do some people behave abnormally? One reason is found in situational factors. For example, harsh punishment for early exploratory behaviour, such as childhood sexual exploration in the form of masturbation, might give rise to adult anxieties over autonomy or sexuality. Poor child-rearing practices, such as a lack of praise or rewards for good behaviour and harsh and unpredictable punishment of misconduct, might give rise to antisocial behaviour. Then, too, children with abusive or neglectful parents might learn to pay more attention to inner fantasies than to the world outside, giving rise, at worst, to difficulty in separating reality from fantasy.

Watson, Skinner, and other behaviourists believed that human behaviour is basically the product of genetic endowment and environmental or situational influences. Like Freud, Watson and Skinner discarded concepts of personal freedom, choice, and self-direction. But whereas Freud saw us as driven by irrational unconscious forces, behaviourists see us as products of environmental influences that shape and manipulate our behaviour. To Watson and Skinner, even the belief that we have free will is determined by the environment, just as surely as is raising our hands in class before speaking. Behaviourists focus on the roles of two major forms of learning in shaping normal and abnormal behaviour: classical conditioning and operant conditioning.

Role of Classical Conditioning Pavlov discovered the conditioned reflex (now called a *conditioned response*) quite by accident. In his laboratory, he harnessed dogs to an apparatus like that in Figure 1.5 to study their salivary response to food. Yet he observed that the animals would start salivating and secreting gastric juices even before they started eating. These responses appeared to be elicited by the sounds made by his laboratory assistants when they wheeled in the food cart. So Pavlov undertook a clever experimental program that showed that animals could learn to salivate to other stimuli, such as the sound of a bell, if these stimuli were associated with feeding.

conditioned response (1) In classical conditioning, a learned or acquired response to a previously neutral stimulus. (2) A response to a conditioned stimulus. Abbreviated *CR*.

unconditioned stimulus Stimulus that elicits an instinctive or unlearned response from an organism. Abbreviated *US* or *UCS*.

unconditioned response Unlearned response or a response to an unconditioned stimulus. Abbreviated *UR* or *UCR*.

conditioned stimulus Previously neutral stimulus that comes to evoke a conditioned response following repeated pairings with a stimulus (unconditioned stimulus) that had already evoked that response. Abbreviated *CS*.

Because dogs don't normally salivate to the sound of bells, Pavlov reasoned that they had acquired this response, called a **conditioned response** (CR) or conditioned reflex, because it had been paired with a stimulus, called an **unconditioned stimulus** (US)—in this case, food—which naturally elicits salivation (see Figure 1.6). The salivation to food, an unlearned response, is called the **unconditioned response** (UR), and the bell, a previously neutral stimulus, is called the **conditioned stimulus** (CS). Can you recognize classical conditioning in your everyday life? Do you flinch in the waiting room at the sound of the dentist's drill? The drill sounds may be conditioned stimuli for conditioned responses of fear and muscle tension.

A now-famous study was conducted in a laboratory by John B. Watson and his assistant, Rosalie Rayner (Watson & Rayner, 1920). The participant in this study, known as "Little Albert," was a healthy and emotionally stable infant. When tested initially, he showed no fear except of the loud noise Watson made by striking a hammer against a steel bar. Rosalie then presented Little Albert with a white rat, in the hope of conditioning him to associate the rat with a loud noise. This pairing was repeated until Albert

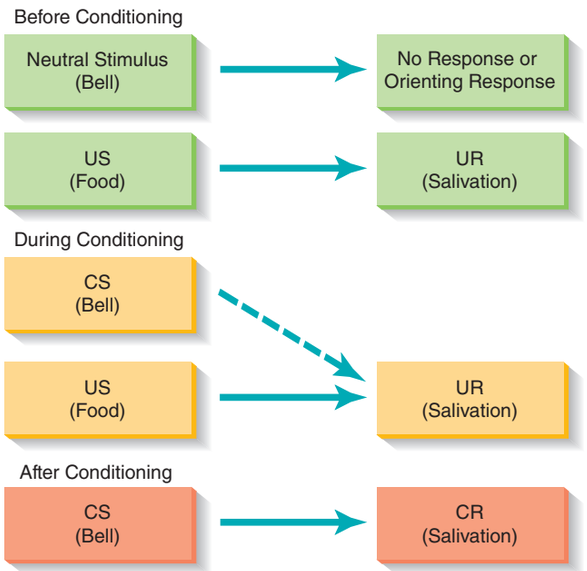


FIGURE 1.6 Schematic diagram of the process of classical conditioning.
Before conditioning, food (an unconditioned stimulus, or US) that is placed on a dog's tongue will naturally elicit salivation (an unconditioned response, or UR). The bell, however, is a neutral stimulus that may elicit an orienting response but not salivation. During conditioning, the bell (the conditioned stimulus, CS) is rung while food (the US) is placed on the dog's tongue. After several conditioning trials have occurred, the bell (the CS) will elicit salivation (the conditioned response, or CR) when it is rung, even though it is not accompanied by food (the US). The dog is said to have been conditioned or to have learned to display the conditioned response (CR) in response to the conditioned stimulus (CS). Learning theorists have suggested that irrational excessive fears of harmless stimuli may be acquired through principles of classical conditioning.

jumped violently, fell forward, and began to whimper. A week later, the rat was paired with the loud noise five more times. At the sight of the white rat alone, Albert began to cry. This is a great example of how phobias or excessive fears may be acquired by classical conditioning.

For instance, a person may develop a phobia for riding on elevators following a traumatic experience while riding on an elevator. In this example, a previously neutral stimulus (elevator) becomes paired or associated with an aversive stimulus (trauma), which leads to the conditioned response (phobia). From the learning perspective, normal behaviour involves responding adaptively to stimuli—including conditioned stimuli.

Role of Operant Conditioning Operant conditioning involves the acquisition of behaviours, called *operant behaviours*, that are emitted by an organism and that operate upon or manipulate the environment to produce certain effects. Skinner (1938) showed that food-deprived pigeons would learn to peck buttons when food pellets drop into their cages as a result. It takes a while for the birds to happen on the first peck, but after a few repetitions of the association betweeen button pecking and food, pecking behaviour, an operant response, becomes fast and furious until the pigeons have had their fill.

In operant conditioning, organisms acquire responses or skills that lead to **reinforcement**. Reinforcers are changes in the environment (stimuli) that increase the frequency of the preceding behaviour.

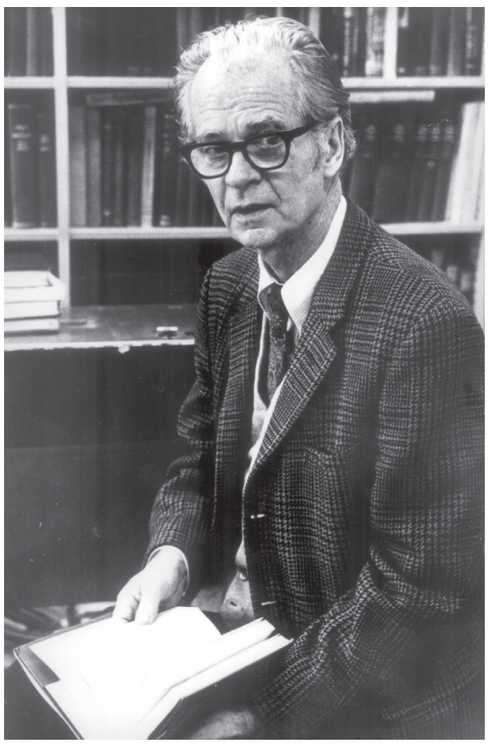
Positive reinforcers boost the frequency of behaviour when they are presented. Food, money, social approval, and the opportunity to mate are examples of positive reinforcers. **Negative reinforcers** increase the frequency of behaviour when they are removed. Fear, pain, discomfort, and social disapproval are examples of negative reinforcers. We learn responses that lead to their removal (like learning to turn on the air conditioner to remove unpleasant heat and humidity from a room).

Adaptive, normal behaviour involves learning responses or skills that permit us to obtain positive reinforcers and escape or avoid negative reinforcers. But if our early learning environments do not provide opportunities for learning new skills, we might be hampered in our efforts to develop the skills needed to obtain reinforcers. A lack of social skills, for example, may reduce opportunities for social reinforcement (approval or praise from others), especially when a person withdraws from social situations. This may lead to depression and social isolation. In Chapter 4, "Mood Disorders and Suicide," we examine links between changes in reinforcement levels and the development of depression.

reinforcement Stimulus that increases the frequency of the response it follows. See *positive* and *negative* and *primary* and *secondary* reinforcers.

positive reinforcers Types of reinforcers that increase the frequency of a behaviour when they are presented. Food and social approval are generally, but not always, positive reinforcers. Contrast with *negative reinforcer.*

negative reinforcers Reinforcers whose removal increases the frequency of an operant behaviour. Anxiety, pain, and social disapproval often function as negative reinforcers; that is, their removal tends to increase the rate of the immediately preceding behaviour. Contrast with *positive reinforcer.*



topham Picturepoint/GetStock.com

B. F. Skinner. American psychologist, author, and pioneer of operant conditioning.

We can also differentiate primary and secondary, or conditioned, reinforcers. **Primary reinforcers** influence behaviour because they satisfy basic physical needs. We do not learn to respond to these basic reinforcers; we are born with that capacity. Food, water, sexual stimulation, and escape from pain are examples of primary reinforcers. **Secondary reinforcers** influence behaviour through their association with established reinforcers. Thus, we learn to respond to secondary reinforcers. People learn to seek money—a secondary reinforcer—because it can be exchanged for primary reinforcers like food and heat (or air conditioning).

Punishments are aversive stimuli that decrease or suppress the frequency of the preceding behaviour when they are applied. Negative reinforcers, by contrast, increase the frequency of the preceding behaviour when they are removed. A loud noise, for example, can be either a punishment (if by its introduction the probability of the preceding behaviour decreases) or a negative reinforcer (if by its removal the probability of the preceding behaviour increases).

Reinforcing desirable behaviour is generally preferable to punishing misbehaviour. But reinforcing appropriate behaviour requires paying attention to it, and not just to misbehaviour. Some children who develop conduct problems can gain the attention of other people only by misbehaving. They learn that by acting out, others will pay attention to them. For them, getting scolded may actually serve as a positive reinforcer, increasing the rate of response of the behaviour it follows. Learning theorists point out that it is not sufficient to expect good conduct from children. Instead, adults need to teach children proper behaviour and regularly reinforce them for performing it.

primary reinforcers Natural reinforcers or stimuli that have reinforcement value without learning. Water, food, warmth, and relief from pain are examples of primary reinforcers. Contrast with *secondary reinforcers*.

secondary reinforcers Stimuli that gain reinforcement value through their association with established reinforcers. Money and social approval are typically secondary reinforcers. Contrast with *primary reinforcers*.

punishments Unpleasant stimuli that suppress the frequency of the behaviours they follow.

behaviour therapy A learning-based model of therapy.

Evaluating Behavioural Perspectives One of the principal values of behavioural models, in contrast to psychodynamic approaches, is their emphasis on observable behaviour and environmental factors, such as reinforcers and punishments, that can be systematically manipulated to observe their effects on behaviour. Learning perspectives have spawned a major model of therapy called **behaviour therapy** (also called *behaviour modification*), which involves the systematic application of learning principles to help people make adaptive behavioural changes. Behaviour therapy techniques have been applied to helping people overcome a wide range of psychological problems, including phobias and other anxiety disorders, sexual dysfunctions, and depression. Moreover, reinforcement-based programs are now widely used in helping parents learn better parenting skills and helping children learn in the classroom.

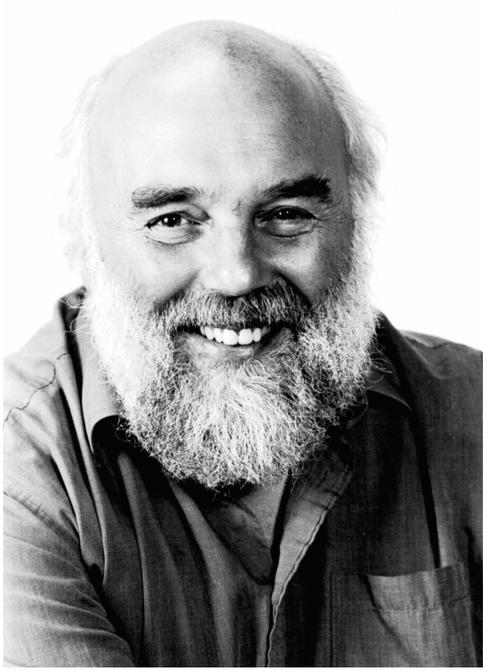
Critics contend that behaviourism cannot explain the richness of human behaviour and that human experience cannot be reduced to observable responses. Many learning theorists too, especially social-cognitive theorists, have been dissatisfied with the strict behaviouristic view that environmental influences—reinforcements and punishments—mechanically control our behaviour. Humans experience thoughts and dreams and formulate goals and aspirations; behaviourism seems not to address much of what it means to be human.

A Neo-humanistic Perspective Psychologist Leslie Greenberg of York University has been at the forefront of advancing the humanistic approach, which has been influenced by contemporary developments in the areas of neuroscience and cognitive theory. A key feature of his neo-humanistic approach is that it attempts to reconcile the theoretical differences between the major psychological theories we have discussed so far in this chapter. For example, Greenberg (2002a, 2002b) views humans as comprising multiple facets—emotions, motivations, cognitions, and actions—each of value for survival. In comparison, the different psychological theories have traditionally emphasized that one domain of human functioning is superior to the others (L. S. Greenberg, 2002a, 2002b). This theoretical competition has created major theoretical dilemmas

by pitting emotions against reason, conscious against unconscious processes, conformity against self-determination, and mind against both behaviour and biology, to name a few. Accordingly, each theory has given rise to divergent therapeutic approaches. However, despite their serious differences, they all have a common therapeutic goal: to regulate and minimize undesirable emotions (L. S. Greenberg, 2002a, 2002b). Greenberg's theory, instead of emphasizing the mere reduction of unpleasant emotions, embraces the notion that emotions—both pleasant and unpleasant—serve essential adaptive purposes and should therefore be heeded. For example, emotions have survival value when they warn us of potentially dangerous situations, aid us in interpersonal communications (especially nonverbal), and enhance learning by arousing attention and motivation. To suppress or radically modify our emotions is to deny ourselves this important survival function.

The cornerstone of this approach is our **emotional intelligence**. Emotional intelligence dictates how well we experience and express our emotions in a purposeful way to cope with life. Strengthening our emotional intelligence leads to well-being, and this is the premise for a neo-humanistic therapy referred to as *emotion-focused therapy* (EFT).

The strengths of humanistic-existential perspectives in understanding abnormal behaviour lie largely in their focus on conscious experience and their innovation of therapy methods that assist people along pathways of self-discovery, self-acceptance, and self-determination. The humanistic-existential movement put concepts of purpose, free choice, inherent goodness, responsibility, and authenticity back on centre stage and brought them into modern psychology. Ironically, the primary strength of the humanistic-existential approach—its focus on conscious experience—may also be its primary weakness. Conscious experience is private and subjective. Therefore, the validity of formulating theories in terms of consciousness has been questioned. How can psychologists be certain they accurately perceive the world through the eyes of their clients?



Leslie Greenberg, Distinguished Research Professor

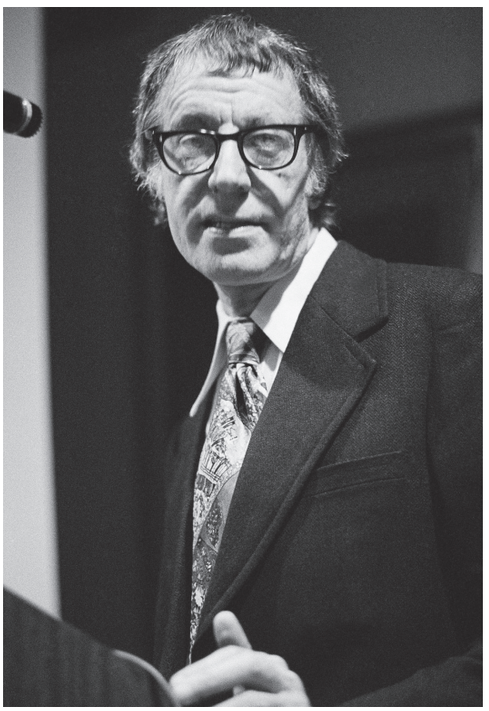
Dr. Leslie Greenberg is a psychology professor at York University and the director of the Emotion-Focused Therapy Clinic, which is affiliated with the York University Psychology Clinic (YUPC). Dr. Greenberg is one of the originators of emotion-focused therapy for individuals and couples.

emotional intelligence "The ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth" (Mayer & Salovey, 1997).

There is now a Canadian initiative to study these types of issues. Founded in Langley, British Columbia, in 1998, the International Network on Personal Meaning (INPM; see www.meaning.ca) is an organization of 300 members, in 30 countries, dedicated to the scientific research and advancement of the role of meaning in our daily lives (Wong, 2002). This multidisciplinary society addresses, through scholarly and educational activities, our needs for health, spirituality, and community. The INPM has also spawned a professional branch of its organization to advance the role of existential psychology and therapy within psychology, the International Society for Existential Psychology and Psychotherapy (ISEPP), and it launched a peer-reviewed journal in 2004, *The International Journal of Existential Psychology and Psychotherapy.*

Critics suggest that neo-humanistic intervention is best suited for personal growth and development, and, indeed, Greenberg (2002a) agrees that it is inappropriate for acute conditions such as panic disorder or disorders of impulse control. Nonetheless, it has been shown to be effective in the treatment of moderate depression, of disorders related to childhood maltreatment and trauma, and of interpersonal problems, and in couples therapy.

COGNITIVE-BEHAVIOURAL PERSPECTIVES In their attempt to turn psychology into a scientific discipline, the early behaviourists focused on outward measurable behaviour and denied the legitimacy of internal mental processes in human behaviour. But the pioneering Canadian psychologist Donald Hebb (1904–1985) thought differently. He believed that "psychology without thought was unthinkable," notes fellow McGill University psychologist Peter Milner (2006, p. 36). In *The Organization of Behavior*, Hebb (1949/2002) outlined his pivotal theory describing how mental process could be explained



AP Photo/Dr. Albert Ellis

Albert Ellis. Psychologist who developed rational-emotive behaviour therapy (REBT), in which therapists help people adjust their thinking and behaviour to treat emotional and behavioural problems. Ellis is considered one of the originators of cognitive-behavioural therapy.

by neural functioning, and this opened the way for cognition to become a worthy scientific field of study (Milner, 2006).

The word *cognitive* derives from the Latin *cognitio*, meaning "knowledge." Cognitive-behaviour theorists study the cognitions—the thoughts, beliefs, expectations, and attitudes—that accompany and may underlie abnormal behaviour. They focus on how reality is coloured by our expectations, attitudes, and so forth, and how inaccurate or biased processing of information about the world—and our place within it—can give rise to emotional difficulties and dysfunctional behaviours. Cognitive-behaviour theorists believe that our interpretations of the events in our lives, and not the events themselves, determine our emotional states and actions.

Albert Ellis Psychologist Albert Ellis (1913–2007) (1977, 1993, 2003) was a prominent cognitive-behaviour theorist who believed that troubling events in themselves do not lead to anxiety, depression, or disturbed behaviour. Rather, it is the irrational beliefs about unfortunate experiences that foster negative emotions and maladaptive behaviour. Consider someone who loses a job, becomes anxious and despondent about it, and spends the day just moping around the house. It may seem that being fired is the direct cause of the person's misery, but the misery actually stems from the person's beliefs about the loss and not directly from the loss itself.

Ellis used an "ABC approach" to explain the causes of the misery. Being fired is an activating event (A). The ultimate outcome or consequence (C) is a dysfunctional emotional, physiological, and behavioural response (Ellis, 2003; Harris, Davies, & Dryden, 2006). But the activating event (A) and the consequences (C) are mediated by various beliefs (B). Some of these beliefs might include "That job was the major thing in my life," "What a useless washout I am," "My family will go hungry," "I'll never be able to find another job as good," or "I can't do a thing about it." These exaggerated and irrational beliefs compound depression, nurture helplessness, and distract us from evaluating what to do. For instance, the beliefs "I can't do a thing about it" and "What a useless washout I am" promote helplessness.

The situation can be diagrammed like this:

Activating events ⟶ Beliefs ⟶ Consequences

catastrophize To exaggerate or magnify the negative consequences of events; to "blow things out of proportion."

Ellis emphasized that apprehension about the future and feelings of disappointment are perfectly normal when people face losses. However, the adoption of irrational beliefs leads people to **catastrophize** the magnitude of losses, leading in turn to profound distress and states of depression. By intensifying emotional responses and nurturing feelings of helplessness, such beliefs impair coping ability.

Ellis asserted that there are three core irrational beliefs held by many people worldwide:

1. "I must be thoroughly competent, adequate, achieving, and lovable at all times, or else I am an incompetent worthless person. . . ."
2. "Other significant people in my life must treat me kindly and fairly at all times, or else I can't stand it, and they are bad, rotten, and evil persons who should be severely blamed, damned, and vindictively punished for their horrible treatment of me. . . ."
3. "Things and conditions absolutely must be the way I want them to be and must never be too difficult or frustrating. Otherwise life is awful, terrible, horrible, catastrophic, and unbearable. . . ." (Ellis, 2003, pp. 236–237)

Ellis noted that the desire for others' approval is understandable but that it is irrational to assume you cannot survive without it. It would be marvellous to excel in everything we do, but it's absurd to demand it of ourselves. Sure, in tennis it would be great to serve and volley like a pro, but most people haven't the leisure time or aptitude to perfect the game. Insisting on perfection deters people from playing simply for fun.

Ellis developed a model of therapy called *rational-emotive behaviour therapy* (REBT) to help people dispute these conditioned habitual irrational beliefs and substitute more rational ones. Ellis admitted that childhood experiences are involved in the origins of irrational beliefs but stated that cognitive appraisal—the here and now—causes people misery. For most people who are anxious and depressed, the ticket to greater happiness lies not in discovering and liberating deep-seated conflicts but in recognizing and modifying irrational self-demands.

Aaron Beck Another prominent cognitive theorist, psychiatrist Aaron Beck, proposes that depression may result from "cognitive errors" such as judging oneself entirely on the basis of one's flaws or failures and interpreting events in a negative light (as though wearing blue-coloured glasses) (A. T. Beck, Rush, Shaw, & Emery, 1979). Beck stresses the pervasive roles of four basic types of cognitive errors that contribute to emotional distress, which are explained in Table 1.2 (on page 32).

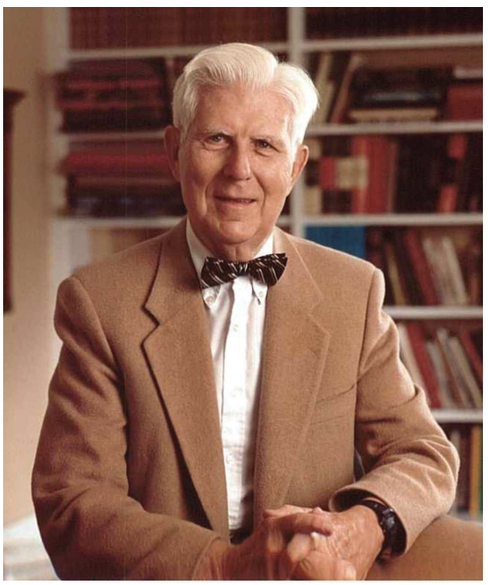
Like Ellis, Beck has developed a major model of therapy, called *cognitive therapy* (now commonly referred to as *cognitive behavioural therapy*), that focuses on helping individuals with psychological disorders identify and correct faulty ways of thinking.

Social-cognitive theorists, who share much in common with the cognitive-behaviour theorists, focus on the ways in which social information is encoded. Let's now consider social-cognitive theory, which broadens the focus of both traditional behaviourist and cognitive theories by considering the role of social factors in learning and behaviour.

Albert Bandura **Social-cognitive theory** represents the contributions of theorists such as Alberta-born Albert Bandura (Zimmerman & Schunk, 2002). Social-cognitive theorists emphasize the roles of thinking or cognition and of learning by observation or modelling in human behaviour. For example, social-cognitive theorists suggest that phobias may be learned vicariously, by observing the fearful reactions of others in real life or as shown on television or in movies.

Social-cognitive theorists also view people as affecting their environment, just as the environment affects them. They see people as self-aware and purposeful learners who seek information about their environment, who do not just respond automatically to the stimuli that impinge on them. Bandura (1986, 1989, 2001) uses the term **reciprocal determinism** to describe how a person's behaviour both acts upon and is influenced by one's personal and environmental factors. For example, if you were lost and approached someone for help, you might elicit a different reaction from a stranger depending on whether you came across as friendly or as fearful or threatening. In turn, the stranger's reaction to your request for help might, in part, be influenced by his or her interpretation of your intentions based on your behaviour. As well, the circumstances play a role—the intentions of a smiling stranger may be viewed quite differently on a dimly lit street corner than in a shopping mall.

Social-cognitive theorists concur with traditional behaviourists that theories of human nature should be tied to observable behaviour. They assert, however, that factors within a person should also be considered in explaining human behaviour. For example, behaviour cannot be predicted from situational factors alone (Rotter, 1972). Whether or not people behave in certain ways also depends on certain cognitive factors, such as the person's **expectancies** about the outcomes of behaviour. For example, we see in Chapter 7 that people who hold more positive expectancies about the outcomes of using drugs are more likely to use them and to use them in larger quantities.



Aaron T. Beck, M.D.

Aaron Beck. One of the leading cognitive theorists. His theories are used in the treatment of clinical depression. Beck developed the widely used self-report inventories called the Beck Depression Inventory (BDI) and the Beck Anxiety Inventory (BAI).

Courtesy Albert Bandura

Albert Bandura. A Canadian/American psychologist whose greatest contribution to the field was his social learning theory, which later became social-cognitive theory. He played a crucial role in the transition between behaviourism and cognitive psychology.

TABLE 1.2

Beck's Four Cognitive Errors

Cognitive Error	Description
Selective Abstraction	People may selectively abstract (focus exclusively on) the parts of their experiences that reflect on their flaws and ignore evidence of their competencies.
Overgeneralization	People may overgeneralize from a few isolated experiences. For example, they may see their futures as hopeless because they were laid off or believe they will never marry because they were rejected by a dating partner.
Magnification	People may blow out of proportion or magnify the importance of unfortunate events. Students may catastrophize a bad test grade by jumping to the conclusion that they will flunk out of university and their lives will be ruined.
Absolutist Thinking	People see the world in black and white terms rather than in shades of grey. Absolutist thinkers may assume any grade less than a perfect "A" or a work evaluation less than a rave is a total failure.

social-cognitive theory A broader view of learning theory that emphasizes both situational determinants of behaviour (reinforcements and punishments) and cognitive factors (expectancies, values, attitudes, beliefs, etc.).

reciprocal determinism The ongoing process of two-way interactions among personal factors (cognitive abilities—expectancies, values, attitudes, and beliefs—as well as affective and biological characteristics), behaviours (skills, talents, habits, and interpersonal relations), and environmental factors (physical surroundings and other people).

expectancies In social-cognitive theory, a personal variable describing people's predictions of future outcomes.

Donald Meichenbaum University of Waterloo professor emeritus Donald Meichenbaum is a co-founder of cognitive-behavioural modification (CBM). Like the other cognitive behaviourists, Meichenbaum's perspective (1976, 1977) considers the interdependence of thoughts, emotions, and actions (interpersonal in particular). Aggressive boys and adolescents, for example, are likely to incorrectly encode other people's behaviour as threatening (see Chapter 11, "Abnormal Behaviour Across the Lifespan"). They assume other people intend them ill when they do not. Aggressive children and adults may behave in ways that elicit coercive or hostile behaviour from others, which serves to confirm their aggressive expectations (Meichenbaum, 1993). Information may also be distorted by what cognitive-behaviour therapists call *cognitive distortions*, or errors in thinking. For example, people who are depressed tend to develop an unduly negative view of their personal situation by exaggerating the importance of unfortunate events they experience (Meichenbaum, 1993). From Meichenbaum's perspective, behavioural interventions can be used to initiate change anywhere along the chain of cognitive, affective, and behavioural events.

Evaluating Cognitive-Behavioural Perspectives As we'll see in later chapters, cognitive-behavioural theorists have had an enormous impact on our understanding of abnormal behaviour patterns and the development of therapeutic approaches. The overlap between the behavioural-based and cognitive approaches is best represented by the emergence of cognitive-behavioural therapy (CBT), a form of therapy that focuses on modifying self-defeating beliefs in addition to overt behaviours. A major issue concerning cognitive-behavioural perspectives is their range of applicability. Cognitive-behavioural therapists have largely focused on emotional disorders relating to anxiety and depression but have had less impact on the development of treatment approaches or conceptual models of more severe forms of disturbed behaviour, such as schizophrenia. Moreover, in the case of depression, it remains unclear, as we see in Chapter 4, to what extent distorted thinking patterns are causes of depression or effects of depression.

REVIEW IT

Psychological Perspectives

- **What are the major psychological perspectives on abnormal behaviour?** Psychodynamic perspectives reflect the views of Freud and his followers, who believed that abnormal behaviour stems from psychological causes involving underlying psychic forces within the personality. Learning theorists posit that the principles of learning can be used to explain both abnormal and normal behaviour. Humanistic-existential theorists believe that it is important to understand the obstacles that people encounter as they strive toward self-actualization and authenticity. Cognitive-behavioural theorists focus on the role of distorted and self-defeating thinking in explaining abnormal behaviour.

A CLOSER LOOK

Canadian Mental Health Promotion

PROMOTING MENTAL HEALTH

Mental health promotion is a proactive, holistic, multi-levelled, synergistic process that fosters resilience as one progresses toward an optimal sense of well-being (see Figure 1.7 in this box) (P. A. Johnson, 1989). It is proactive to the extent that it builds up knowledge, resources, and strengths for overall wellness and enhances the capacity of individuals to take control of their lives (MHP, 2003). Through education, community efforts, and government policy, mental health promotion champions optimal mental health, reduces the stigma of mental illness, and engenders a mental wellness style of life (Baylis, 2002). Mental health promotion also moves beyond the commonly held notion that mental health is the mere absence of mental illness (Kahan & Goodstadt, 2002). Moreover, it applies equally to all people, sick or well, disabled or not, problematic or not (MHP, 2003). Mental health promotion is also holistic in nature and places high importance on mental, emotional, social, physical, and spiritual functioning (WHO, n.d.). It considers the reciprocal interactions of these personal domains on multiple levels, including the physical environment, family, community, and population culture, politics, and economics (MHP, 2003; Kahan & Goodstadt, 2002). As is true with risk factors, there is a synergistic effect among health-promoting factors. Exposure to a combination of mental health promotion factors can be greater than the sum total effect of the individual factors (J. Dryden, Johnson, Howard, & McGuire, 1998).

MENTAL HEALTH PROMOTION INITIATIVES

There is a demonstrated need for a different kind of investment in the mental health of Canadians of all ages (Stephens & Joubert, 2001). Canada is sitting on the cusp of change when it comes to mental health promotion and prevention (CAMIMH, 2000), and psychology's role will likely expand across all health-related areas (J. L. Arnett, 2006). Below are just some of the initiatives that cover the full spectrum of mental health promotion services and supports:

- Health Canada (2001b) sponsors four Centres of Excellence for Children's Well-Being across Canada that focus on child welfare, communities, early childhood development, special needs, and youth engagement.
- The federal government introduced the Public Health Agency of Canada (2004) to focus on illness prevention and health promotion.
- In their report *Out of the Shadows at Last: Transforming Mental Health, Mental Illness and Addiction Services in Canada*, Canadian senators Kirby and Keon (2006) recommended that a Canadian Mental Health Commission be established for mental health promotion and prevention of mental illness. The commission was established in 2007.

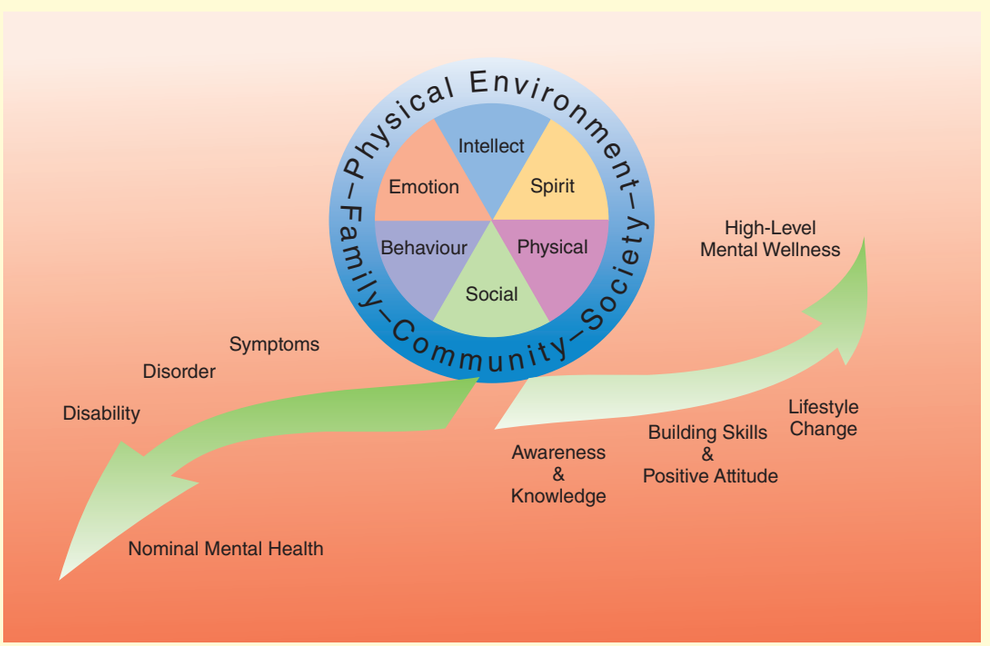


FIGURE 1.7 The mental wellness continuum.
Original figure created by author from concepts taken from various sources.

Sociocultural Perspectives on Abnormal Behaviour

To what extent does abnormal behaviour arise from forces within a person, as the psychodynamic theorists propose, or from the learning of maladaptive behaviours, as the learning theorists suggest? The sociocultural perspective informs us that a fuller accounting of abnormal behaviour requires that we also consider the impact of social and cultural factors, including factors relating to ethnicity, gender and social roles, and poverty. Sociocultural theorists seek causes of abnormal behaviour that may reside in the failures of society rather than in the person.

Acadia University community psychologist Patrick O'Neill (2004) says that when dealing with social problems, it is important to keep the focus on dysfunctional social systems rather than on an individual's dysfunction. O'Neill cautions that it is easy for social researchers to inadvertently divert their attention toward an individual's "problem" rather than focus on the social causes of that problem, and that doing so contributes to a "blame the victim" mentality. For example, if we were to consider the problem of drug abuse from a sociocultural perspective, we should focus on the social structures that underlie substance-abuse problems instead of on the personal characteristics or "failings" of the drug addict. The former requires sweeping social changes that, for example, would reduce poverty and improve living conditions. The latter perpetuates interventions that deal with the problem of drug dependence one drug user or one drug dealer at a time.

EVALUATING SOCIOCULTURAL PERSPECTIVES As you recall from the discussion of homelessness, low-income Canadians experience higher rates of mental health problems than the rest of society. The reasons why are not easy to determine. One line of thinking suggests that poverty gives rise to mental illness. Psychosocial stress resulting from chronic unemployment, financial difficulties, or inadequate housing can create a sense of futility or emotional upset that may lead to the development of mental illness (Health Canada, 2002b). Additionally, low-income Canadians have less access to mental health counselling opportunities than higher-income individuals, and this creates a further barrier to getting well (Health Canada, 1999b).

downward drift hypothesis The belief that people with psychological problems may drift downward in socioeconomic status.

An alternative view is the **downward drift hypothesis**, which suggests that mental illness leads to poverty. According to this perspective, having a mental illness makes it difficult to hold down a well-paying job. The lack of gainful employment may lead people to drift downward in social status, thereby explaining the linkage between low socioeconomic status and severe behaviour problems (Canadian Health Network, 1999).

Yet another view posits that the connections are not so simple. There may be one or more other variables that influence both poverty and mental illness, such as discrimination, dysfunctional family relationships, interpersonal conflict, or a lack of social-support networks.

All in all, the sociocultural theorists have focused much-needed attention on the social stressors that may lead to abnormal behaviour. Throughout the text we consider how sociocultural factors relating to gender, race, ethnicity, and lifestyle better inform our understanding of abnormal behaviour and our response to people deemed mentally ill. Later in this chapter we consider how issues relating to race, culture, and ethnicity impact the therapeutic process.

REVIEW IT

Sociocultural Perspectives

- **What is the basic idea that underlies sociocultural perspectives?** Sociocultural theorists believe that we need to broaden our outlook on abnormal behaviour by taking into account the role of social ills in society, including poverty, racism, and lack of opportunity, in the development of abnormal behaviour patterns.

Interactionist Perspectives

We have seen several models or perspectives for understanding and treating psychological disorders. The fact that there are different ways of looking at the same phenomenon does not mean one model must be right and the others wrong.

No one theoretical perspective can account for the complex forms of abnormal behaviour we encounter in this text. Each of the perspectives we have discussed—the biological, psychological, and sociocultural frameworks—contributes something to our understanding, but none offers a complete view. We are only beginning to uncover the subtle and often complex interactions involving the multitude of factors that give rise to abnormal behaviour patterns.

Many theorists today adopt an interactionist perspective. They believe we need to take into account the interaction of multiple factors representing biological, psychological, sociocultural, and environmental domains in order to explain abnormal behaviour. We'll describe two prominent interactionist models—the diathesis-stress and the biopsychosocial models.

THE DIATHESIS-STRESS MODEL The leading interactionist model is the **diathesis-stress model**, which holds that psychological disorders result from the combination or interaction of a diathesis (vulnerability or predisposition) with stress (see Figure 1.8). The model proposes that some people possess a vulnerability or **diathesis**, possibly genetic in nature, that increases their risk of developing a particular disorder. Yet whether they develop the disorder depends on the kinds and level of stress they experience. Stress may take the form of biological events such as prenatal trauma, birth complications, or physical illness; psychosocial factors such as childhood sexual or physical abuse or family conflict; and negative life events such as prolonged unemployment or loss of loved ones. This model is crucial to an understanding of the development of mental health issues.

diathesis-stress model Model of abnormal behaviour that posits that abnormal behaviour patterns, such as schizophrenia, involve the interaction of genetic and environmental influences. In this model, a genetic or acquired predisposition, or *diathesis*, increases an individual's vulnerability to developing the disorder in response to stressful life circumstances. If, however, the level of stress is kept under the person's particular threshold, the disorder may never develop, even among people with the predisposition.

diathesis A predisposition or vulnerability.

In some cases, people with a diathesis for a particular disorder may remain free of the disorder or develop a milder form of the disorder if the level of stress in their lives remains low or they develop effective coping responses for handling the stress they encounter. However, the stronger the diathesis, the less stress is generally needed to produce the disorder. In some cases the diathesis may be so strong that the disorder develops even under the most benign life circumstances.

The diathesis-stress hypothesis was originally developed as an explanatory framework for understanding the development of schizophrenia (see Chapter 10). It has since been applied to other psychological disorders, such as depression. Although the term *diathesis* generally refers to an inherited predisposition, a diathesis may involve psychological factors such as dysfunctional thinking patterns or personality traits. For example, a dysfunctional pattern of thinking may put individuals at greater risk of developing depression in the face of upsetting or stressful life events such as prolonged unemployment or divorce (see Chapter 4).

THE BIOPSYCHOSOCIAL (SYSTEMS) MODEL The diathesis-stress model is not the only interactionist account of how abnormal behaviour patterns develop. Another prominent interdisciplinary approach is the **biopsychosocial model**, which, compared to the diathesis-stress model, expands and more clearly delineates the number of factors and dynamic interactions between a person and his or her environment. The biopsychosocial

biopsychosocial model A conceptual model that emphasizes that human behaviour is linked to complex interactions among biological, psychological, and sociocultural factors.

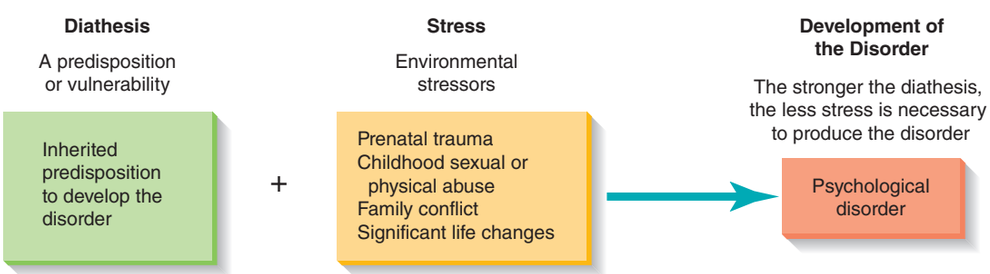


FIGURE 1.8 **The diathesis-stress model.**

model encompasses the dynamic interplay of three major systems or domains. Two systems can be thought of as being internal: the biological, which includes genetic, epigenetic, and neurophysiologic factors; and the psychological, which includes psychoanalytic, behavioural, humanistic-existential, and cognitive-behavioural factors. The third system consists of what is considered to be external or outside of us: the sociocultural and environmental factors. Together, these biopsychosocial systems determine the range of known variables involved in the development of abnormal behaviour (Schumacher & Petronis, 2006; Szyf, 2006).

EVALUATING INTERACTIONIST PERSPECTIVES Research shows how biopsychosocial factors play a major role in the aging process, diseases, and abnormal behaviour. Indeed, the discovery of epigenetic factors and the pivotal role they play in our overall well-being may prove to be the proverbial "missing link" that helps us explain how psychological, sociocultural, and environmental factors interact with our genetic code. Throughout the rest of the book, you will also find that many forms of abnormal behaviour involve a complex interplay of multiple influences that include psychological, biological, and/or sociocultural factors.

REVIEW IT

Interactionist Perspectives

- **What is the distinguishing feature of the interactionist perspectives?** The diathesis-stress model posits that some people have predispositions (diatheses) for particular disorders but that whether these disorders actually develop depends on the type and severity of the stressors these people experience. The biopsychosocial approach examines the interplay of biological, psychological, and sociocultural factors in abnormal behaviour. External and internal factors can alter epigenetic patterns, which can affect gene expression. This can lead to an increased risk of both physical and psychological disorders.

Define It

abnormal psychology, 2
acetylcholine, 22
agoraphobia, 5
Alzheimer's disease, 21
axon, 20
behaviour therapy, 28
behaviourism, 25
biopsychosocial model, 35
catastrophize, 30
choleric, 9
clinical psychologist, 2
conditioned response, 26
conditioned stimulus, 26
conscious, 23
defence mechanisms, 25
deinstitutionalization, 13
delusions, 4
dementia praecox, 14
demonological model, 9
dendrites, 20
diathesis, 35
diathesis-stress model, 35
DNA, 18
dopamine, 22
downward drift hypothesis, 34
ego, 24
ego ideal, 24
emotional intelligence, 29
epigenetics, 18
epigenome, 18
exorcism, 10
expectancies, 32
gene expression, 18
gene silencing, 18
general paresis, 15
hallucinations, 3
humours, 9
hypnosis, 15
hysteria, 15
id, 23
ideas of persecution, 4
identification, 24
knobs, 21
medical model, 2
melancholia, 9
moral principle, 24
moral therapy, 12
negative reinforcers, 27
neo-Freudians, 25
neurons, 20
neurotransmitters, 21
norepinephrine, 21
paranoid, 3
phenothiazines, 12
phlegmatic, 9
pleasure principle, 23
positive reinforcers, 27
possession, 9
preconscious, 23
primary process thinking, 24
primary reinforcers, 28
proteins, 18
psychiatrist, 2
psychic, 23
psychoanalytic theory, 22
psychodynamic model, 15
psychological disorders, 2
psychosis, 25
punishments, 28
reality principle, 24
receptor site, 21
reciprocal determinism, 32

reinforcement, 27
repression, 25
sanguine, 9
secondary process thinking, 24
secondary reinforcers, 28
self, 24
serotonin, 22
social-cognitive theory, 32
soma, 20
structural hypothesis, 23
superego, 24
synapse, 21
terminals, 21
trephining, 9
unconditioned response, 26
unconditioned stimulus, 26
unconscious, 23
world view, 9

Think About It

- What criteria would you use to distinguish abnormal behaviour from normal behaviour?
- What behaviours in your own cultural group might be considered abnormal by members of other groups?
- Do you believe abnormal behaviour is a function more of nature (biology) or of nurture (environment)? Explain.
- Do you believe biology is destiny? Why or why not?
- What role did hypnotism play in the development of psychological models of abnormal behaviour?
- What do you believe should be done about the problem of homelessness for people with psychological disorders?

Weblinks

Canadian Psychological Association (CPA)
www.cpa.ca
This is the homepage for Canada's national psychological association. It is the central source for information about the profession of psychology in Canada.

Canadian Psychiatric Association (CPA)
www.cpa-apc.org
This is the homepage for Canada's national professional association for psychiatrists. It contains psychiatric e-journals and information on a variety of professional matters.

Canadian Mental Health Association (CMHA)
www.cmha.ca
The CMHA is a voluntary organization that is dedicated to the promotion of mental health for all Canadians. Its website contains a diverse selection of mental health resources.

Mental Health Commission of Canada
www.mentalhealthcommission.ca
The MHCC promotes mental health in Canada, and works with stakeholders to change the attitudes of Canadians toward mental health problems and to improve services and support. Its website contains reports and videos.

Mental Health Page at Health Canada
www.hc-sc.gc.ca/hl-vs/mental/index_e.html
This website provides convenient access to a range of online materials related to the promotion of mental health, mental health programs and services in Canada, and the mental health issues, problems, and disorders encountered by Canadians.

Centre for Addiction and Mental Health (CAMH)
www.camh.net
CAMH is Canada's largest teaching and research centre for mental health and addiction problems. The site contains resources on a wide range of mental health and addiction concerns.

What Is Abnormal Psychology?

How Do We Define Abnormal Behaviour?

Criteria for Determining Abnormality

Psychologists generally apply some combination of the following criteria in determining that a behaviour is abnormal:

- Unusualness
- Social deviance
- Faulty perceptions or interpretations of reality
- Significant personal distress
- Maladaptive or self-defeating behaviours
- Dangerousness

Historical Perspectives on Abnormal Behaviour

Views About Abnormal Behaviour and Treatment Change Over Time

Prevailing world views shape concepts of abnormal behaviour and treatment.

The Demonological Model

- Ancient societies attributed abnormal behaviour to divine or supernatural forces.

Origins of Naturalistic Explanations

- Hippocrates (460–377 BC) believed that an imbalance of vital bodily fluids caused abnormal behaviour.

Medieval Times (AD 476–1450)

- Belief in demonic possession held sway and exorcists were used to rid people who behaved abnormally of the evil spirits that were believed to possess them.

Witchcraft (1400s–1600s)

- During the Renaissance, ideas about demonic possession coexisted with naturalistic explanations of abnormal behaviour.

Asylums in Europe and the New World

- As a refuge for both beggars and the disturbed, asylums in Europe were generally dreadful or circus-like. In North America, treatment-based asylums first appeared in Quebec (1639).

The Reform Movement and Moral Therapy (1700s–1800s)

- Proponents believed that mental patients could be restored to functioning if they were treated with dignity and understanding.

Transition in the Modern Era

Institutionalization dominated from the late 1800s until the 1950s as new treatments and community supports became available.

Decline of Moral Therapy

- The belief that the "insane" could not be successfully treated led to deteriorating conditions in mental hospitals until the 1950s.

Deinstitutionalization

- Shifting care to community-based settings began in the 1960s.

Community Mental Health

- A work still in progress today in Canada, where mental patients rely on dramatically fewer hospital beds and a fragmented system of community services and supports.

Scientific Models of Abnormal Behaviour

Core explanations of abnormal behaviour are based on the medical, psychological, and sociocultural models.

Medical Model

- Abnormal behaviour is based on underlying biological defects or abnormalities. Disorders can be classified, like physical illnesses, according to their distinctive causes and symptoms.

Psychological Models

- The first psychological explanation of abnormal behaviour originated with Freud. His psychodynamic model holds that the causes of abnormal behaviours lie in the interplay of forces within the unconscious mind. A diversity of psychological models soon followed.

Sociocultural Models

- Psychological problems may be rooted in the failures of society, such as poverty, social decay, discrimination, and lack of economic opportunity. The stigma of "mental Illness" can also strip people of their dignity and give rise to discrimination.

Biological Perspectives

Genetics

Genome
- All the genetic material encoded in the DNA located in the nucleus of cells in living organisms.

DNA
- Long, complex molecular structure that determines our unique genetic code.

Genetic and Chromosomal Disorders
- Genetic errors occur when the number or order of the DNA base pairs is wrong. Chromosomal diseases result from too many, too few, or incomplete chromosomes.

Epigenetics

Epigenome
- Inherited and acquired molecular variations to the genome.

Epigenetic Mechanisms
- Regulates gene expression (turned on) and gene silencing (turned off).

Epigenetic Errors
- Failure to properly regulate or signal genes to turn on or off.

Stem Cells

- Undifferentiated cells that are capable of indefinite self-replication and differentiation into specialized cells.

The Nervous System

Neurons
- Cells of the nervous system that use neurotransmission to communicate with each other and with the body.

Neurotransmitters
- Chemical substances that foster neural impulses.

Parts of the Nervous System
- Central Nervous System (CNS): the brain and spinal cord send and receive messages in the body.
- Peripheral Nervous System (PNS): the somatic and autonomic nervous systems carry messages between the CNS and the body.

Psychological Perspectives

Psychodynamic Models

Theories based on the belief that psychological problems are derived from unconscious psychological conflicts that can be traced to childhood.

Sigmund Freud—Psychoanalysis
- Levels of consciousness, personality structures (id, ego, super ego), stages of psychosexual development.

Learning Models

The view that abnormal behaviour can be described in terms of learning or unlearning behaviours.

Ivan Pavlov—Classical Conditioning
- The conditioned response, unconditioned stimulus, unconditioned response, and conditioned stimulus.

B. F. Skinner—Operant Conditioning
- The effect of reinforcers and punishments on behaviour.

Humanistic-Existential Models

Theories that focus on self-actualization and living authentically.

- Carl Rogers
- Neo-Humanism

Cognitive-Behavioural Models

Focus on the cognitions—the thoughts, beliefs, expectations, and attitudes—that accompany and may underlie abnormal behaviour.

- Albert Ellis—Rational-Emotive Behaviour Therapy
- Aaron Beck
- Albert Bandura
- Donald Meichenbaum—Cognitive-Behaviour Modification