CHAPTER 6
Atypical psychological development

KEY KNOWLEDGE

- the conceptualisation of normality including typical and atypical behaviours; adaptive and maladaptive behaviours; and mental health and mental disorder as a continuum
- mental health as a product of internal and external factors which assist individuals to cope with change and challenge
- major categories of psychological disorder: addiction disorders; anxiety disorders; mood disorders; personality disorders; and psychotic disorders
- the ‘two-hit’ hypothesis as an explanation for the development of particular psychological disorders, illustrated by schizophrenia.

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Sometimes psychological development does not occur as it should. An individual may think, feel or behave in a markedly different way from how they usually do, or their development may not be at the same rate as others of about the same age. How they go about their daily life may also differ from what is considered to be ‘typical’ when compared to others of the same age, sex and cultural group. In such cases, development may be described as atypical.

Atypical development is development that is not typical — it noticeably differs in a significant way from what is usual or appropriate. It may involve the developmental process or its outcomes. Small delays, bursts of rapid progress and other individual differences that occur naturally are to be expected. These are not considered atypical unless they are so unusual that they ‘stand out’ to the extent that they can’t be overlooked.

The terms normal and typical are often used interchangeably. Knowing what is normal (or typical) is important because it assists understanding of what is abnormal (or atypical). But there is not always a clear line between psychological development or functioning that can be considered normal or abnormal.

Sometimes it is quite easy to distinguish between normal and abnormal behaviour. For example, you would probably agree that thanking a friend for a birthday present is normal behaviour. And that it is normal to smile when feeling happy and to feel saddened by the loss of a loved one. Likewise, you would probably agree that the behaviour of a man at a shopping centre insisting to all passers-by that he is the bushranger Ned Kelly is abnormal. And that the behaviour of the lady who avoids television sets because she believes they are used by aliens to read her thoughts is abnormal.

In some cases, however, it is much more difficult to decide on what is normal and abnormal. For example, is it normal to be scared of hairy spiders? To change your plans because of a horoscope prediction? To feel shy and awkward at parties? To be in love with someone you only meet on the internet? To prefer to live alone and isolated from others?

You probably found that you experienced difficulty in deciding what is normal and abnormal for some of these events. You may have even thought ‘It depends…’. This is not surprising because, even in psychology, the meanings of normality and abnormality can vary.
APPROACHES TO DESCRIBING NORMALITY

Throughout the history of psychology, there have been many different approaches to describing normality in relation to mental processes and behaviour. Six that have been influential are the socio-cultural, functional, historical, medical, statistical and situational approaches. Each of these approaches views normality from a different perspective and has a different emphasis on how normality is best described.

Socio-cultural approach

Thoughts, feelings and behaviour that are appropriate or acceptable in a particular society or culture are viewed as normal and those that are inappropriate or unacceptable are considered abnormal. For example, in some cultures, loud crying and wailing at the funeral of a stranger is expected and considered normal, whereas in other cultures it would be considered abnormal as it is inappropriate in that culture to wail at the funeral of a stranger.

Functional approach

Thoughts, feelings and behaviour are viewed as normal if the individual is able to cope with living independently (‘function’) in society, but considered abnormal if the individual is unable to function effectively in society. From this perspective, being able to feed and clothe yourself, find a job, make friends, and so on, is normal, but being so unhappy and lethargic that you cannot get out of bed each morning, do not eat properly, cannot hold a job and avoid relationships with others is abnormal.

Historical approach

What is considered normal and abnormal in a particular society or culture depends on the era, or period in time, when the judgement is made. For example, in many western societies prior to the 20th century, if a parent severely smacked their child for misbehaving, few people would have considered this abnormal, but in many western societies and cultures today such behaviour by a parent is considered abnormal and may even be illegal.

Medical approach

Abnormal thoughts, feelings or behaviour are viewed as having an underlying biological cause and can usually be diagnosed and treated. For example, if someone commonly thinks in a disorganised way, sees or hears things that are not really there, and always showers in their swimming costume because they believe they are constantly under surveillance by ASIO, then this pattern of thoughts, feelings and behaviour could be diagnosed as schizophrenia due to an underlying brain disorder and requiring treatment with prescribed medications.

Statistical approach

The statistical approach is based on the idea that any behaviour or characteristic in a large group of individuals is distributed in a particular way; that is, in a normal distribution. Generally, if a large majority of people, called the ‘statistical average’, think, feel or behave in a certain way, it is considered normal. For example, by this definition, it is normal to laugh when tickled, because most people do. If the thought, feeling or behaviour is shared by a small minority of people, called the ‘statistical extremity’, then it is considered abnormal. So, to laugh when a loved one dies might be considered abnormal because very few people do this.

Situational approach

Within a society or culture, thoughts, feelings and behaviour that may be considered normal in one situation may be considered abnormal in another. For example, if you were to come to school wearing pyjamas, most of your classmates would think that your behaviour was abnormal, yet it is considered normal to wear pyjamas to bed.

Contemporary psychologists recognise that none of these approaches to describing normality is entirely satisfactory on its own. However, each approach has contributed to the understanding of normality (and abnormality) — in particular, understanding of the various factors that need to be considered when using the terms in relation to someone’s thoughts, feelings or behaviour. This is important as the way normality and abnormality are viewed and described provides the basis of diagnosing and treating mental disorders.
CONCEPTUALISATION OF NORMALITY

There is no universally accepted single definition of normality in psychology and psychologists tend to avoid defining it. Instead, psychologists focus on the concept, or 'idea', of normality, how it can be recognised, and key characteristics for doing so. This conceptual approach provides a basis for describing and explaining abnormality, which is particularly useful for the diagnosis and treatment of mental disorders. Two characteristics for distinguishing between normality and abnormality emphasise behaviour — typical and atypical behaviours, and adaptive and maladaptive behaviours.

Typical and atypical behaviours

As with development, typical in relation to individual behaviour means that, at most times, the person acts as they usually (typically) do. There may be some occasions when behaviour is quite different or inconsistent with how it normally occurs, but such variations are temporary. In contrast, atypical behaviour means that the person acts in ways that are unusual (atypical) for them. Essentially, they are behaving 'out of character'. For example, if a usually friendly, outgoing person becomes withdrawn, does not talk or interact with others and stays in their bedroom alone for extended periods of time, they would be considered to be behaving in a way that is atypical for them.

Of course, whether a person's behaviour is typical or atypical depends on such factors as the specific situation and cultural context in which their behaviour occurs. For example, a rock star who is usually well-spoken and polite when out of the public eye may dress, speak and behave outrageously as part of their performance and the public image they wish to portray. Their performance is atypical of their normal, everyday behaviour but not of their behaviour when on stage. However, this does not mean their atypical behaviour when performing is a symptom of a mental health problem that needs to be treated.

Atypical behaviour raises mental health concerns when it is persistent, is evident across different situations in everyday life, and is maladaptive.

FIGURE 6.3 What is accepted as normal in one situation may be considered abnormal in another. If a man violently threw himself at another man and pushed him to the ground in a public space, this would be considered abnormal. However, if the man were on a football field, this behaviour would be considered normal.

FIGURE 6.4 Is Lady Gaga’s onstage behaviour during a live performance typical or atypical?
Adaptive and maladaptive behaviours

Adaptive behaviour involves actions that enable a person to effectively carry out their usual everyday tasks, such as going to school or work and participating in their relationships with others. Basically, the individual is able to ‘adapt’ to the demands of daily living and do so relatively independently.

In contrast, maladaptive behaviour interferes with the person’s ability to carry out their usual activities in an effective way. Maladaptive behaviour is sometimes called dysfunctional behaviour because it disrupts everyday ‘functioning’. There is a reduced ability to do the things one normally does each day, such as attending to personal hygiene, sleeping, eating and preparing food, speaking, decision making, remembering things, and going to work or school.

Common examples of maladaptive behaviours are those associated with phobias and obsessive-compulsive disorder, which can hinder a person in carrying out what are ordinarily regarded as basic, everyday tasks. Thus, a fear of driving, flying, open or enclosed spaces may stop someone from going to school or work, hanging up washing in the backyard, shopping at the local supermarket, and so on.

Similarly, someone with a fear of contamination may repeatedly wash their hands. Washing hands is in itself not a maladaptive behaviour. However, it would be considered maladaptive when it requires so much time and effort each day that it interferes with the ability to get on with everyday living.

LEARNING ACTIVITY 6.1

Review questions

1. Explain the difference between the following with reference to a relevant example:
   (a) typical and atypical development
   (b) typical and atypical behaviour
   (c) adaptive and maladaptive behaviour.

2. When would atypical behaviour be of concern to a mental health professional?

3. Explain the meaning of normality with reference to an example.

4. Name and outline the main approaches psychologists have used to describe normality and to differentiate between normality and abnormality.

5. (a) Describe two examples not used in the text of normal behaviour in Australian society that may be considered abnormal in another society.
   (b) Describe two examples not used in the text of normal behaviour in a cultural group within Australian society that may be considered abnormal by another cultural group in Australia.

MENTAL HEALTH AND MENTAL DISORDER

For most people, the distinction between physical health and physical illness is quite clear. When we are physically healthy, our bodies are functioning as we know they should and we have no aches, pains or problems that cause us concern or prevent us from doing the things we normally do.

Our physical health can be viewed as being somewhere along a continuum, or scale, ranging from extremely healthy, when we have no physical ‘complaints’ or concerns, to extremely unhealthy. There are also different levels of physical wellbeing in between the two extremes. For example, muscle soreness after having played a sport for the first time might cause mild discomfort and be considered a problem for a day or so, but it would not be considered serious. While the muscle pain might remind you of the need to be fitter, it is unlikely to prevent you from washing the dishes, attending school, going to your casual job, or having a driving lesson. However, an excruciating pain in your knee may indicate that you have a more serious problem. A physical health problem for which your discomfort is severe and/or lasts for an extended period of time will often lead you to see a doctor for a diagnosis and a treatment plan.

Mental health is similar to physical health in several ways; however, mental health primarily involves the mind, whereas physical health primarily involves the body. When we are mentally healthy, we think, feel and behave in ways that enable us to cope with change and the challenges arising in the course of everyday life. Mental health is a state of wellbeing in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and
is able to make a contribution to his or her community (World Health Organization, 2014).

According to this definition, mental health is a positive concept that generally relates to the enjoyment of life, ability to cope with stress, the fulfilment of goals and potential, and a sense of connection to others. Psychologists view mental health as a vital part of overall health and wellbeing. It is a desirable quality in its own right and is more than the absence of mental ill-health.

‘Good’ mental health doesn’t mean we don’t have times of sadness, anger or anxiety. Good mental health is reflected in how well we deal with the positive and negative emotions associated with the various events in our lives. For example, a mentally healthy student who is preparing to do their first of six exams in two days time may feel anxious and be grumpy or short-tempered. However, they will probably still be able to eat, study, sleep, remember what to take to the exam, hold a conversation with friends and laugh when something funny happens.

In addition, mental health is not something we either have or do not have. Instead, we may be more or less mentally healthy (or not healthy). Therefore, like physical health, mental health is often represented as being on a continuum. As shown in figure 6.6, the continuum ranges from mentally healthy, when we are functioning well and coping with the normal stresses of everyday life, through to a mental health problem that interferes with functioning but is mild and temporary, to a diagnosable mental disorder or mental illness that tends to be more serious, longer-lasting and likely to require treatment.

Mental health problems are common and usually impair functioning. Their experience is sometimes referred to as a ‘rough patch’, a ‘low point’ or ‘the blues’. As shown in table 6.1, mental health problems can cause a range of personal difficulties such as worry, inability to concentrate for as long as usual, loss of motivation, social withdrawal and changes in appetite and sleep. However, mental health problems do not usually meet all the criteria for a diagnosable mental disorder.

A mental health problem most often occurs as a result of a life stressor, and is usually less severe and of a shorter duration than a mental disorder. It will often resolve with time or when the life stressor changes or passes. However, if a mental health problem persists or increases in severity, it may develop into a mental disorder. Examples of mental health problems include the sadness and despair associated with loss and grief, and symptoms associated with stress (Hunter Institute of Mental Health, 2015).

Mental disorder, also called psychological disorder or mental illness, involves a combination of thoughts, feelings and/or behaviours which impair the ability to function effectively in everyday life. There is a wide range of mental disorders, each with different symptoms. As shown in table 6.1, examples include depression and schizophrenia.

The essential characteristics of a mental disorder are:
- the disorder occurs within the individual
- there is clinically diagnosable dysfunction in thoughts, feelings and/or behaviour
- it causes significant personal distress or disability in functioning in everyday life
- actions and reactions are atypical of the person and inappropriate within their culture
- the disorder is not a result of a personal conflict with society.

**FIGURE 6.6** Mental health is often represented on a continuum.

**TABLE 6.1** Characteristics of mental health, a mental health problem and mental disorder

<table>
<thead>
<tr>
<th>Mental health</th>
<th>Mental health problem</th>
<th>Mental disorder (illness)</th>
</tr>
</thead>
<tbody>
<tr>
<td>People who are mentally healthy can:</td>
<td>People with a mental health problem may:</td>
<td>People are diagnosed with a specific mental disorder such as a:</td>
</tr>
<tr>
<td>• use their abilities to reach their potential</td>
<td>• feel worried, tense, low, irritable, quiet, confused, angry</td>
<td>• mood disorder e.g., depression, bipolar disorder</td>
</tr>
<tr>
<td>• cope with the normal stresses of everyday life</td>
<td>• have difficulties concentrating, making decisions and thinking clearly</td>
<td>• psychotic disorder e.g., schizophrenia, delusional disorder</td>
</tr>
<tr>
<td>• work productively in school and paid employment</td>
<td>• become forgetful</td>
<td>• personality disorder e.g., antisocial personality disorder, narcissistic personality disorder</td>
</tr>
<tr>
<td>• contribute constructively to their community</td>
<td>• experience changes in sleep and appetite</td>
<td>• addiction disorder e.g., gambling</td>
</tr>
<tr>
<td>• form positive relationships with others</td>
<td>• experience a loss of energy and motivation</td>
<td>• anxiety disorder e.g., agoraphobia, separation anxiety disorder</td>
</tr>
<tr>
<td>• think logically and clearly</td>
<td>• feel that things are somehow ‘different’</td>
<td></td>
</tr>
</tbody>
</table>
Each of these characteristics captures a part of what a mental disorder is. All must be evident for a particular mental disorder to be diagnosed. A mental disorder usually lasts longer than a mental health problem and causes more distress and disruption to a person’s life. As with physical illnesses, mental disorders differ in severity and involve variable amounts of impairment and distress to the individual. It is also possible for a person to feel ‘mentally ill’ even though a doctor or mental health professional cannot find evidence of any known disorder.

The symptoms of most mental disorders can be successfully treated. It is rarely possible for a mental disorder to ‘go away’ without treatment from a qualified professional. Professional help may include psychotherapy (‘talking therapy’) and/or medication. This may be complemented with a community program such as participation in a social support group.

About one in five (20%) adult Australians will experience a mental disorder ranging from mild to moderate at some stage in their lives (see box 6.1). Many will live with more than one mental disorder at a time, such as anxiety and depression, which commonly occur together. Episodes of a mental disorder can come and go during different periods in our lives. Some people experience only one episode and fully recover. For others, however, a mental disorder may recur throughout their lives.

### BOX 6.1

**Incidence of mental disorder in Australia**

Mental disorder is common in Australia and its incidence has steadily increased over the past 25 years. This does not mean there is a mental disorder ‘epidemic’ in Australia. Rather, greater community awareness of mental disorders, and media campaigns that encourage people to recognise and seek support for mental health issues, may explain the recent increase in self-reports of mental disorders.

Figure 6.7 shows estimates of the incidence of mental disorder within the Australian population. The data are from the National mental health report 2013, published by the Australian Government Department of Health. The report used the term mental illness rather than mental disorder.

- **Severe**: 2–3% (Approx. 600 000 Australians)
- **Moderate**: 4–6% (Approx. 1 million Australians)
- **Mild**: 9–12% (Approx. 2 million Australians)

In addition to the groups above a further 25% of the population will experience a mental illness at some point in their lives.

**Figure 6.7** Twelve month prevalence estimates of mental illness (disorder) in the population by severity level, based on diagnosis, disability and chronicity.
**LEARNING ACTIVITY 6.2**

**Rating mental health issues**

On a mental health continuum, like that shown on page 7, indicate where you consider each of the following individuals is best placed.

1. Trinh is extremely anxious before a job interview.
2. Stacey is excited about getting into the university course of her choice.
3. In the 48 hours following his grandfather’s death, Hamish has no energy, stays in bed for hours during the day, does not eat much, does not shower often, experiences a constant headache, stays awake all night and has bouts of uncontrolled crying.
4. Over a period of four months after her grandfather’s death, Ismail has no energy, stays in bed during the day, does not eat much, does not shower often, experiences a constant headache, stays awake all night and has bouts of uncontrolled crying.
5. Sienna worries about how she looks before going to a party.
6. Kania is so worried about how she looks before going to a party that she doesn’t go.
7. Jack is angry with his brother for using all the hot water in the shower.
8. Olivia is so angry with her brother for using all the hot water in the shower one day that she does not talk to him for six months.

Compare your mental health ratings with others in your class. Explain differences in ratings by class members.
MENTAL HEALTH AS A PRODUCT OF INTERNAL AND EXTERNAL FACTORS

Our mental health is influenced by a wide variety of internal and external factors throughout our entire life span. These influences can be organised into three different domains, or areas, within a framework called the biopsychosocial model.

The biopsychosocial model, sometimes called the biopsychosocial approach or theory, is a way of describing and explaining how biological, psychological and social factors combine and interact to influence a person’s mental health. The model is based on the idea that mental health is best understood by considering specific factors from within each domain and how these factors may combine and interact to influence our wellbeing.

- **Biological factors** involve physiologically based or determined influences, often not under our control, such as the genes we inherit, balances or imbalances in brain chemistry, brain and nervous system functioning, hormonal activities, and bodily responses to stress.

- **Psychological factors** involve all those influences associated with mental processes such as our beliefs, attitudes, ways of thinking, prior learning, perceptions of ourselves, others and our external environment, how we learn, make decisions, solve problems, understand and experience emotions, respond to stressors, and manage stress, and reconstruct memories.

- **Social factors** include our skills in interacting with others, the range and quality of our interpersonal relationships, the amount and type of support available from others when needed, exposure to stressors, poverty, level of education, employment history, risks of violence, access to health care, and specific cultural influences such as our values and traditions.
The biopsychosocial model reflects a holistic view of mental health — the individual is considered as a ‘whole person’ functioning in their unique environment. The focus is not just on the individual’s mental condition (‘within the individual’), but also on their wider social setting and circumstances (‘outside the individual’). In addition, focusing on the influence of factors from one or two domains, rather than all three, is likely to give an incomplete and therefore inaccurate picture of a person’s mental health. This also applies to a mental health problem or mental disorder an individual may have and the treatment that may be required.

According to the model, factors from each of the three domains are equally important for mental health (or disorder). However, it is recognised that specific factors may have more or less influence on an individual’s mental health and put the individual at more or less risk for having good mental health or developing a mental disorder.

Factors from within each domain affect and are affected by one another. For example, factors within each domain may combine with other factors in the same domain, as well as with factors in the other two domains. This complex interaction of multiple factors helps account for individual differences in mental health, as well as mental health problems and disorders. For example, as shown in figure 6.10, depression could be explained by the combined effects of genes and brain chemistry (biological), negative ways of thinking and prior learning experiences (psychological) and environmental conditions (social).

**BOX 6.3**

**Maintaining good mental health**

If you asked, most people would be able to tell you how they could look after their physical health. For example, they are likely to make such statements as: ‘Make sure I get enough rest’, ‘Eat healthy foods and exercise regularly’ and ‘Take any medication prescribed by a doctor’. But fewer people are likely to be able to tell you how they could look after their mental health.

Good mental health helps us to more fully enjoy life and appreciate the people and environment around us. We respond better to the stressors and challenges of daily life, use our abilities to the fullest and make the most of opportunities when our mental health is strong.

The Mental Health Council of Australia advises that there are three categories of activities we can do to build and maintain good mental health. These involve practising ‘ABCs’.

- **Act** by keeping yourself as active as possible, physically, socially and mentally. For example:
  - exercise: regular physical activity improves psychological wellbeing and can reduce depression and anxiety
  - enjoy hobbies: taking up a hobby brings balance to your life by allowing you to do something you enjoy, and it also keeps your brain active
  - treat yourself well: cook yourself a good meal, have a bubble bath, see a movie, call a friend or relative you haven’t called for ages, sit on a park bench and take in your surroundings.
- **Belong** by connecting to your community. For example:
  - invite: join a group, chat to a neighbour, meet a friend
  - share a laugh: life often gets too serious, so when you hear or see something that makes you smile or laugh share it with someone you know
  - do one thing at a time: for example, when you are out for a walk or spending time with friends, turn off your mobile phone and stop making that mental ‘to do’ list.
- **Commit** to looking for challenges, having a go and getting involved. For example:
  - ‘collect’ positive emotional moments: recall times when you have experienced pleasure, comfort, tenderness, confidence or other positive emotions
  - learn ways to cope with negative thoughts: don’t block negative thoughts but learn how to interrupt them and not let them take over
  - set personal goals: for example, finish that book you started three years ago, walk around the block every day, learn a new skill, call your friends instead of waiting for the phone to ring
  - keep a journal (or even talk to the wall!): expressing yourself after a stressful day can help you gain perspective, release tension and even boost your body’s resistance to illness
  - volunteer: volunteering helps others, makes us feel good about ourselves, widens social networks, provides new learning experiences, and can bring balance to people’s lives.

*Source: Adapted from Mental Health Council of Australia (2012). Be active for your mental health ([Fact sheet](http://mhaustralia.org/fact-sheets/be-active-your-mental-health-fact-sheet)*

![FIGURE 6.11](image-url) Exercising regularly is good for both your mental and physical health.
LEARNING ACTIVITY 6.3

Review questions
1. Explain the meaning of mental health and mental disorder with reference to relevant examples.
2. In what ways is a mental health problem different from a mental disorder? Give an example to highlight the difference.
3. Does maladaptive behaviour necessarily indicate the presence of a mental disorder? Explain your answer.
4. Explain the relationship between mental and physical health.
5. Draw a pie chart in which you include and summarise all the essential characteristics of mental disorder with key words.
6. For each of the following examples, indicate with the appropriate letter(s) which characteristic(s) of a mental disorder is apparent.
   (a) the disorder occurs within the individual
   (b) there is clinically diagnosable dysfunction in thoughts, feelings and/or behaviour
   (c) the disorder causes significant personal distress or disability in functioning in everyday life
   (d) actions and reactions are atypical of the person and inappropriate within their culture
   (e) the disorder is not a result of a personal conflict with society

   Example 1
   Jan collects old newspapers and uses them as ‘wallpaper’. She has two rooms completely wallpapered with the newspapers from the last three months. She has started on her third room and intends to ‘wallpaper’ her entire house, including the ceilings.

   Example 2
   Khalid recently started to feel sad and lonely. While still able to function at school, go to his casual job and fulfil other commitments, Khalid feels ‘down’ most of the time. He worries about what is happening to him.

   Example 3
   Chrissy is a successful businesswoman, but has recently stopped showering. She refuses to leave her apartment or see any of her friends, and spends her whole day watching television talk shows. This behaviour has been continuous for three weeks. Visits by her family and friends and the threat of losing her job have failed to bring Chrissy back to ‘reality’ and she continues to spend her days staring blankly at the television screen.

   Example 4
   Zophia is afraid to leave her house. For the past three years, she has ‘forced’ herself to go out in order to maintain contact with her friends and family. More recently, she has felt physically sick whenever she goes beyond the front gate. Consequently, she spends most weekday evenings worrying about whether she will be able to get beyond the front gate in the morning so that she can get to work.

7. (a) What is the biopsychosocial model?
   (b) Name and describe the three domains in the biopsychosocial framework with reference to relevant examples.
   (c) For each domain, give two additional examples of factors not referred to in the text.

8. (a) Briefly describe three key characteristics of the biopsychosocial model’s explanation of mental health.
   (b) Write a series of questions a psychologist who has adopted the biopsychosocial model may ask a patient or client presenting with symptoms of a mental disorder.
   (c) Consider a recent time when you were feeling stressed. You do not have to identify the source of your stress. Copy the following table and identify factors from each domain that may have contributed to:
   - i. the onset of stress
   - ii. recovery from stress.
CATEGORIES OF MENTAL DISORDERS

All sciences classify. For example, botanists classify plants into categories and subcategories according to species. Astronomers classify the stars, planets and other astronomical bodies according to colour, size and temperature. The medical profession classifies diseases according to symptoms and the organ or system affected.

Likewise, clinical psychologists, psychiatrists and other mental health professionals classify mental disorders in different categories according to characteristic patterns of thoughts, feelings and behaviour. When certain symptoms regularly occur together and develop or progress in a particular way, they are considered to be typical of a specific mental disorder. When someone displays this particular pattern of symptoms they are said to fit the category and therefore have the disorder to which those symptoms belong.

The most widely used system with categories of mental disorders that is used for diagnostic purposes is called the Diagnostic and Statistical Manual of Mental Disorders, or DSM for short. It was first developed by the American Psychiatric Association in 1952 and is now in its fifth edition, called DSM-5. As indicated in its title, the DSM uses the term ‘mental disorder’ rather than ‘mental illness’ or ‘psychological disorder’.

The DSM provides:
- a system for classifying and diagnosing mental disorders based on recognisable symptoms that are precisely described
- information on the typical course of each disorder, that is, a description of how the disorder will progress
- information on the age at which people are more likely to develop the disorder
- information on the degree of impairment
- information on the prevalence of the disorder (how commonly it occurs)
- whether the disorder is likely to affect others in the family
- the relationship of the disorder to gender, age and culture.

An important feature of the DSM is that it does not suggest specific causes of any disorder unless a cause can be definitely established. It simply names the disorders and describes each in detail. There are 21 major categories of mental disorders in the DSM and numerous sub-categories. Some of the major categories are outlined in table 6.2.

A diagnosis of a mental disorder should always be made by a qualified mental health professional. This usually occurs through an ‘assessment’ which can involve several lengthy interviews. During the assessment, the mental health professional talks with the individual to find out what their issues, concerns and symptoms are. They then consider their symptoms with reference to the DSM guidelines for diagnosing a disorder. Once a diagnosis is made, the mental health professional develops a treatment or management plan for the specific disorder that has been diagnosed.

**FIGURE 6.12** The current DSM has 21 major categories of mental disorders. It is the most commonly used system for classification and diagnosis of mental disorders.

**FIGURE 6.13** The ICD-10 is another widely used classification system with categories of mental disorders. It is published by the World Health Organization and primarily used in Europe.
TABLE 6.2 Examples of DSM-5 categories of mental disorders

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neurodevelopmental disorders</td>
<td>These disorders often emerge before starting school. They include autism, Attention-Deficit/Hyperactivity Disorder, intellectual disability (with onset early in development) and various learning and motor disorders which first present early in the life span.</td>
</tr>
<tr>
<td>Neurocognitive disorders</td>
<td>Include disorders involving major or minor impairment to cognitive functioning, such as those due to Alzheimer’s disease, Parkinson’s disease, Korsakoff’s syndrome, traumatic brain injury and delirium.</td>
</tr>
<tr>
<td>Substance-related and addictive disorders</td>
<td>Include alcohol-related disorders, cannabis-related disorders, hallucinogen-related disorders, stimulant-related disorders and gambling disorder.</td>
</tr>
<tr>
<td>Schizophrenia spectrum and other psychotic disorders</td>
<td>Common symptoms include delusions, hallucinations and disorganised thinking.</td>
</tr>
<tr>
<td>Depressive disorders</td>
<td>Characterised by severe lowering of mood for an extended period of time. Include major depressive disorder and premenstrual dysphoric disorder.</td>
</tr>
<tr>
<td>Bipolar and related disorders</td>
<td>Characterised by severe disturbances of mood involving alternating episodes of mania (e.g. elation, high energy and activity) and depression (e.g. sadness, low energy and activity).</td>
</tr>
<tr>
<td>Anxiety disorders</td>
<td>Include phobias, panic attack, panic disorder, separation anxiety disorder and substance/medication-induced anxiety disorder.</td>
</tr>
<tr>
<td>Obsessive-compulsive and related disorders</td>
<td>Characterised by recurring thoughts and/or impulses that are difficult to control. Include obsessive-compulsive disorder, hoarding disorder, trichotillomania (hair-pulling disorder) and excoriation (skin-picking) disorder.</td>
</tr>
<tr>
<td>Feeding and eating disorders</td>
<td>Include avoidant and restrictive food intake of infancy and early childhood, and serious eating disorders more common in adolescence such as anorexia nervosa, bulimia nervosa and binge-eating disorder.</td>
</tr>
<tr>
<td>Sleep wake disorders</td>
<td>Characterised by persistent sleep problems. Include insomnia, narcolepsy, substance/medication-induced sleep disorder and breathing related sleep disorders such as sleep apnea.</td>
</tr>
<tr>
<td>Disruptive, impulse-control and conduct disorders</td>
<td>Characterised by problems in behavioural and emotional self-control. Include kleptomania, pyromania and intermittent explosive disorder (i.e. aggressive outbursts).</td>
</tr>
<tr>
<td>Personality disorders</td>
<td>Include general personality disorder, narcissistic personality disorder, antisocial personality disorder and dependent personality disorder.</td>
</tr>
</tbody>
</table>


LABELLING SOMEONE WITH A MENTAL DISORDER

The term labelling is sometimes used to describe the process of classifying and naming a mental disorder following a diagnosis. Labelling can be useful. For example, it can help psychologists (and psychiatrists) recognise and specifically describe a mental disorder and assist them in working out an appropriate treatment and management plan. It is also helpful when mental health professionals communicate with one another about a client’s mental health. The names of the different categories and subcategories provide concise terms for describing and discussing disorders and help ensure a common understanding of what is being discussed. Similarly, labelling is useful when reporting research on mental disorders in journal articles and posters.

However, labelling a particular pattern of thoughts, feelings and behaviour as a specific type of mental disorder can also have a negative effect on the individual being labelled and result in their experiencing social stigma. **Social stigma** refers to the negative attitudes and beliefs held in the wider community that lead people to fear, reject, avoid and discriminate against people with a mental disorder. Stigma is a sign of social unacceptability or undesirability, often involving shame or disgrace. It can influence how people with a mental disorder think and feel about themselves and the way they believe they are viewed by others in the community.

Once a label has been given to a person, it may be there for life and consequently can affect the way that individual is treated by others. For example, consider how you might be affected by being told you have schizophrenia and require hospitalisation to stabilise your symptoms and work out the right mix of medication. After you are discharged and go home, the fact that you are now a ‘former mental patient’ could have a great impact on your life. Friends or loved ones may now treat you differently and employment could be difficult to obtain if you mention that you have schizophrenia.

There is little doubt that labelling can have these and many other negative consequences. It is clear from existing research that the general public holds very negative views and misunderstandings of mental disorder and that people with a disorder and their families often experience social stigma. In an attempt to help deal with this problem, it is now standard practice to use language that describes the psychological concept rather than the person; for example, using the phrase ‘a person with schizophrenia’ rather than the term ‘a schizophrenic’.
Rosenhan’s (1973) research on labelling

A research study by American psychologist David Rosenhan (1973) is commonly used to demonstrate some of the problems of labelling. Rosenhan and his colleagues set up a situation where eight people who had never experienced symptoms of any serious mental disorder presented themselves to various psychiatric hospitals and told the medical staff they had been hearing voices.

All of the pseudo-patients (fake patients) were admitted to the hospitals and diagnosed as suffering from schizophrenia. From the moment they were admitted they behaved as they normally would and no longer faked the symptoms of schizophrenia. Their stay in the hospitals ranged from seven to 52 days. None of the medical staff identified them as pseudo-patients; however, some of the actual patients recognised them as frauds. When the pseudo-patients were finally discharged, it was on the grounds that they were ‘in remission’. None of them was seen as being ‘cured’, suggesting that the symptoms could recur.

Rosenhan concluded that medical staff, including psychologists, could not recognise ‘normal’ behaviour and once a person was labelled as having a specific mental disorder, all of their subsequent behaviour was interpreted as part of their disorder. For example, while the pseudo-patients were in hospital, they openly made notes relating to Rosenhan’s research study. However, the staff interpreted this activity as part of their ‘schizophrenic behaviour’. After Rosenhan’s findings were published, the hospital staff said that, in order for this to be a fair assessment, they should have been warned of the experiment.

In a follow-up study, Rosenhan told staff at one hospital that in the next three months pseudo-patients would present themselves to the hospital. The hospital staff were asked to identify which of their new patients were the pseudo-patients. In fact, no pseudo-patients were actually sent, yet one staff member was sure that 41 out of 193 patients were pseudo-patients. Rosenhan concluded that a system of diagnosing and labelling mental disorders that allowed these kinds of errors to occur was not a very reliable one.

Not all psychologists agree with Rosenhan’s conclusions. Many have also criticised his procedures. For example, prominent American psychiatrist Robert Spitzer (1976), who led the development of the DSM, argued that being able to lie and get admitted to a hospital is no proof that the system used to diagnose a mental disorder does not work. He pointed out that hearing voices is a sign of serious psychological dysfunction and rightfully should not have been ignored just because the person then appeared ‘normal’. He also stated that the diagnosis of ‘in remission’ is a rare one and shows that the staff did realise the pseudo-patients were not behaving completely as expected of a person labelled ‘schizophrenic’.

**FIGURE 6.14** A dormitory room in a psychiatric hospital like that visited by Rosenhan (1973). There has been a shift away from this type of accommodation. If a person needs hospital care for a mental illness, accommodation is often in a separate room as part of a psychiatric unit in a public or private hospital.

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**LEARNING ACTIVITY 6.5**

**Analysis of research by Rosenhan (1973) on labelling**

Read the summary of the research on labelling and answer the following questions.

1. What was the population and who were the participants in the research?
2. Formulate a relevant research hypothesis.
3. What type of research method was used?
4. Which current ethical standards or guidelines may have been breached by Rosenhan? Give a reason for each suggestion.
5. What do the results suggest about the effects of labelling someone with a mental disorder?
**BOX 6.4**

**Medical student syndrome**

Have you ever read about a disease or disorder on the internet or heard about it on television and become convinced that you are suffering the same symptoms and therefore must have the disease or disorder? This is known as medical student syndrome, as it is most frequently observed in medical students.

It is thought that psychology students who study mental disorders may also suffer from the same syndrome. Although some students do suffer from a disorder, most are merely experiencing an exaggerated sense of their susceptibility to a disorder. It has been found that one in every five individuals responds ‘yes’ to the question ‘Have you ever felt that you were going to have a nervous breakdown?’ Of course, most of these people have never suffered an actual breakdown (Sue, Sue & Sue, 2005).

Research has shown that students who plan to complete a degree in psychology report more worry about their mental health than those planning to complete a degree in another discipline. However, the process of learning about mental disorders eventually decreases their anxiety about their own mental health (but increases it about the health of their family members).

It is also thought that anyone who reads a lot of medical information is susceptible to medical student syndrome. More recently, the term ‘cyberchondria’ has been coined to describe the condition suffered by people who use the wealth of medical information on the internet to diagnose themselves with a serious physical health disorder. What starts as a web search about headache leads to the conclusion that they must have a brain tumour!

As you learn more about mental health and mental disorders you may recognise symptoms in yourself — or in others. These ‘symptoms’ are more likely to be a normal reaction to life circumstances and not a sign of an actual mental disorder. For example, feeling down, anxious or overwhelmed may be an understandable response to a stressful situation such as studying many different subjects at school, all of which ‘must be passed at a high standard’.

However, if you are concerned, talk about your concerns with a friend, family member or teacher. If you then feel you may have a problem, consider seeking support from your school’s student welfare service or other mental health professional.

**FIGURE 6.15** As you learn more about mental health and mental disorders you may recognise ‘symptoms’ in yourself — or in others — that are often not a sign of an actual disorder. If you have a concern, consult a mental health professional.

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**LEARNING ACTIVITY 6.6**

**Review questions**

1. What are two potential benefits of labelling and categorising mental disorders?
2. On what basis or criteria are mental disorders categorised?
3. (a) What does the abbreviation DSM stand for?
   (b) What is the DSM used for?
   (c) Give three examples of the type of information in the DSM about each mental disorder.
   (d) What type of information is not provided in the DSM?
4. (a) Suggest why it is important that only qualified mental health professionals use a DSM type manual to diagnose someone’s mental disorder.
   (b) Suggest one or more ways in which this type of system could be misused by non-qualified individuals. Explain your answer.
5. (a) What is social stigma?
   (b) Explain the relationship between labelling and social stigma.
   (c) Explain why individuals diagnosed with a mental disorder view the removal of social stigma as important.
   (d) Explain why mental health professionals view the removal of social stigma as important.
   (e) Suggest two ways in which social stigma could be reduced or removed.

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**LEARNING ACTIVITY 6.7**

**Reflection**

Which do you believe is the more appropriate term — mental disorder or mental illness? Explain your preference.
ADDITION DISORDERS

The term 'addiction' is most commonly used to describe the uncontrollable use of drugs and other chemical substances on which people can become dependent. Dependence on these substances is primarily physiological — changes occur in bodily processes so that a certain amount of the substance is necessary for minimal daily functioning. This is called physical dependence and it becomes apparent when the substance is withheld or unavailable and the user undergoes painful withdrawal reactions such as physical pain and intense cravings. The cravings suggest a psychological component of addiction, so the term psychological dependence is used to refer to the mental desire to experience the effects produced by the substance.

More recently, the use of the term addiction has expanded to cover dependence on any type of substance, including alcohol, nicotine in cigarettes and caffeine in tea, coffee, Coca-Cola™ and various energy drinks. Common to these substances on which we can become dependent and take in excess is activation of the brain’s ‘reward system’ which produces or heightens the experience of pleasure, making us ‘feel good.’

There has been increasing recognition among psychologists in more recent times that a diverse range of behaviours may also be addictive. They can result in dependence, involve a psychological component and possibly also a physical component as with substance addiction. For example, everyday activities such as eating, shopping, physical exercise, work, watching TV, playing violent games and using the internet are believed to be potentially addictive (see box 6.5).

Consequently, addiction is now used more broadly to refer to a condition in which someone feels a recurring urge to use a substance or engage in an activity despite potentially harmful consequences. The condition is associated with a low level of self-control and a mental preoccupation with the continued use of the substance or engagement in the activity. These are so strong that normal daily activities are ignored and override all potential detrimental effects, including those that can be devastating.

Common characteristics of all addictions, whether they involve substance abuse or addictive behaviour, are:
- activation of the brain’s reward system resulting in a pleasurable feeling (e.g. a ‘high’ or ‘buzz’, pain reduction, loss of anxiety) that reinforces (rewards and strengthens) the addiction, thereby maintaining the addiction
- persistent and repeated thoughts, feelings and behaviour associated with the addictive substance or activity
- reduced level of self-control associated with the addictive substance or activity
- tolerance involving decreased sensitivity to the activity over time, whereby increasing amounts of the substance or activity are required to achieve the original desired effects

**FIGURE 6.16** Addiction refers to a condition in which an individual feels a recurring urge to use a substance or engage in an activity despite potentially harmful consequences.
• withdrawal involving unpleasant psychological and/or physical reactions that occur when the particular use or activity is suddenly reduced or discontinued e.g. sadness, excitability and/or irritability, sweating, nausea, vomiting, headaches, sleep disturbances.

Types of addiction disorders
The DSM-5 has a category of mental disorders called Substance-Related and Addictive Disorders. The substance-related disorders encompass all types of legal and illegal drugs, such as alcohol, caffeine, tobacco, marijuana, sedatives and stimulants. The disorders include:
• Alcohol-related disorders such as Alcohol use disorder (mild, moderate or severe), Alcohol withdrawal
• Caffeine-related disorders such as Caffeine intoxication, Caffeine withdrawal
• Cannabis-related disorders such as Cannabis use disorder (mild, moderate or severe), Cannabis intoxication (with or without perceptual disturbances)
• Hallucinogen-related disorders such as use of drugs, such as PCP, LSD and ‘angel dust’

Inhalant-related disorders (mild, moderate or severe), cannabis intoxication (with or without perceptual disturbances)
• Opioid-related disorders such as use of legal and illegal drugs morphine, heroin, methadone and codeine
• Sedative-use disorders such as using substances that calm and relax the body; for example, ‘tranquilisers’ and prescription sleeping medications
• Stimulant-related disorders such as use of substances that arouse the body; for example, ecstasy, ‘ice’, cocaine and amphetamines (speed, ‘uppers’)
• Tobacco-related disorders such as Tobacco use disorder, Tobacco withdrawal.

Gambling disorder is the only addictive disorder in this category. It is expected other addictions that primarily involve behaviour will be added when more research evidence becomes available. For example, Internet Gaming Disorder has been shortlisted for inclusion, pending further research evidence (see box 6.5). In this section, we focus on gambling disorder and consider biological, psychological and social factors that influence its development and treatment.

BOX 6.5

Internet addiction
Some people are so preoccupied with the internet and unable to control their use of it that it jeopardises their wellbeing, relationships, education or employment. This has led some psychologists to propose the mental disorder of internet addiction to describe and explain the uncontrollable, maladaptive use of this technology.

Detecting and diagnosing internet addiction is often difficult because its legitimate use for personal and business reasons can mask addictive behaviour. It is estimated that over 70% of office workers misuse the internet during work hours, visiting social media sites, reading personal email, shopping online, booking holiday accommodation, or visiting pornography, gaming or gambling sites (Young, 2010).

The Internet Addiction Diagnostic Questionnaire (IADQ) was developed by American psychologist Kimberly Young as an initial screening instrument for diagnostic purposes. The following questions are linked to key symptoms associated with internet addiction.

1. Do you feel preoccupied with the internet (think about previous online activity or anticipate next online session)?
2. Do you feel the need to use the internet with increasing amounts of time in order to achieve satisfaction?
3. Have you repeatedly made unsuccessful efforts to control, cut back or stop internet use?
4. Do you feel restless, moody, depressed, or irritated when attempting to cut down or stop internet use?
5. Do you stay online longer than originally intended?
6. Have you jeopardized or risked the loss of significant relationship, job, educational or career opportunity because of the internet?
7. Have you lied to family members, therapist, or others to conceal the extent of involvement with the internet?
8. Do you use the internet as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression)?

According to Young (2015), if a person answers ‘yes’ to five or more questions about a six-month period, they may be suffering from an internet addiction. Other signs include neglecting friends and family, neglecting sleep to stay online, being dishonest with others, feeling guilty, ashamed, anxious, or depressed as a result of online behaviour, and withdrawing from other pleasurable activities.

The DSM-5 has identified a more specific type of internet addiction involving internet gaming. This is described as ‘persistent and recurrent use of the internet to engage in games, often with other players, leading to clinically significant impairment or distress in a 12-month period’ (p. 795). Internet gaming disorder, as it is currently called, will be included in the next edition of the DSM if further research evidence justifies it.

eGuideplus
Website
• TED talk by Kimberly Young on internet addiction 17 m 3 s
• ABC catalyst story on video game addiction 10 m 45 s
Gambling

Gambling is any activity in which something of value (e.g. money) is put at risk in the hope of obtaining something of higher value. The activity may be legal or illegal but the outcome is usually determined by chance and therefore unknown.

The most popular gambling activities in Australia are purchasing lotto and instant lottery (‘scratchy’) tickets. Wagering (‘betting’) on horses or greyhounds, ‘playing’ electronic gaming machines (‘pokies’) and casino table games such as blackjack and roulette account for the overwhelming bulk of money gambled (Productivity Commission, 2010).

The various forms of gambling can be divided into two categories: continuous and non-continuous. Continuous forms are those in which the time between betting and knowing the outcome is short — which permits instant gratification. This includes ‘pokies’, bingo, horse racing, casino betting and ‘scratchies’. Non-continuous forms are those in which the time between wagering and knowing the outcome is long — thereby delaying gratification. The most common or popular non-continuous activity is lottery gambling such as Tattslotto or Powerball.

Gambling as an addiction

For many Australians, most forms of gambling are a source of recreation and pleasurable social activity. Gambling can provide time away from the pressures of work, a temporary escape from boredom, fun, excitement, a chance to win money, the thrill of anticipation and an opportunity to get away from thoughts and feelings that may be ‘depressing’, to get out and meet people and socialise, and to ‘dream’ about winning a fortune. Gambling venues such as casinos and clubs can also provide an accessible, comfortable and safe social environment, which many people — particularly women, elderly people and ethnic communities — have found appealing (Productivity Commission, 2010).

For a number of people, however, gambling stops being pleasurable and becomes a serious problem that causes harm to themselves and/or to those around them such as their partner, family, friends or others in the community. When gambling begins to consume more money and time than a person can afford, it can affect many parts of the individual’s life, including their psychological and physical health, relationships, finances, work and study.

The terms problem gambling, gambling disorder and pathological gambling are often used interchangeably to describe gambling behaviour that has become very ‘problematic’ or addictive. Legislative and regularity authorities in Australia tend to use the term problem gambling. The DSM-5 uses the term gambling disorder.

Problem gambling

Problem gambling is characterised by difficulties in limiting money and/or time spent on gambling, which leads to negative consequences for the gambler, for others or for the community. This is the preferred definition in Australia as it includes the notion that problem gambling can be represented on a continuum as a behaviour that occurs in varying degrees. The description ‘difficulties in limiting money and/or time
spends on gambling' suggests a continuum of gambling behaviours from individuals who have no difficulty (including non-gamblers) to those who have extreme difficulty (see figure 6.18).

Problem gambling can also be represented on a continuum as ranging from occasional non-problematic use (e.g. recreational gambling) when there are no adverse impacts through to extreme over-involvement (e.g. gambling accompanied by a sense of impaired self-control), with a range of more or less problematic behaviours in between. There is no clear point, however, at which a 'recreational gambler' becomes a 'problem gambler' (Productivity Commission, 2010).

### Gambling disorder

The DSM-5 describes gambling disorder as persistent and recurring maladaptive gambling behaviour that disrupts everyday personal, family and/or vocational activities. In order to be diagnosed with gambling disorder, a person must experience at least four of the following symptoms (or criteria) in a 12-month period:

1. Needs to gamble with increasing amounts of money in order to achieve the desired excitement.
2. Is restless or irritable when attempting to cut down or stop gambling.
3. Has made repeated unsuccessful efforts to control, cut back, or stop gambling.
4. Is often preoccupied with gambling (e.g., having persistent thoughts of reliving past gambling experiences, handicapping or planning the next venture, thinking of ways to get money with which to gamble).
5. Often gambles when feeling distressed (e.g., helpless, guilty, anxious, depressed).
6. After losing money gambling, often returns another day to get even ('chasing' one's losses).
7. Lies to conceal the extent of involvement with gambling.
8. Has jeopardised or lost a significant relationship, job, or educational or career opportunity because of gambling.
9. Relies on others to provide money to relieve desperate financial situations caused by gambling.

As with problem gambling, the DSM represents gambling disorder on a continuum ranging in severity. The severity of the disorder is determined by the number of symptoms, as follows:

- **Mild**: 4–5 symptoms
- **Moderate**: 6–7 symptoms.
- **Severe**: 8–9 symptoms.

Because of the increasing number of problem or addicted gamblers in the general population and the significant harmful effects of uncontrollable gambling on the individual, their family, friends, colleagues and the wider community, a growing number of psychologists are conducting research on causes and treatments of the behaviour. Most believe that it is caused by the interaction of a combination of biological, psychological and social factors, rather than any single factor. We consider some examples of contributing factors.

### Table 6.3: Prevalence of problem gambling in Victorian adults

<table>
<thead>
<tr>
<th>Risk for problem gambling</th>
<th>% Victorian adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-problem gamblers</td>
<td>64.31</td>
</tr>
<tr>
<td>Low-risk gamblers</td>
<td>5.70</td>
</tr>
<tr>
<td>Moderate-risk gamblers</td>
<td>2.36</td>
</tr>
<tr>
<td>Problem gamblers</td>
<td>0.70</td>
</tr>
<tr>
<td>Non-gamblers</td>
<td>26.93</td>
</tr>
</tbody>
</table>


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**eGuideplus**

- Data analysis on gambling activities in Victoria
- Practical activity on problem gambling
Contributing factors
The onset of a gambling addiction can occur during adolescence, young adulthood or at any other time in the life span. Generally, it develops over a number of years during which there is a gradual increase in both the frequency and amount of gambling. There is no known single event that triggers the development of addictive gambling behaviour.

Many factors, however, have been proposed as contributing to its development. One approach to explaining gambling addiction is based on the biopsychosocial model. From this perspective, factors that interact in influencing its development include biological factors (such as activation of a reward system in the brain that make gambling a pleasurable experience), psychological factors (such as distorted ways of thinking) and social factors (such as social acceptability of gambling).

Dopamine reward system
The dopamine reward system is a neural pathway in the brain that, when stimulated, results in pleasurable effects. These positive feelings can reinforce and motivate a person to perform certain activities, including gambling and other addictive behaviours. As the name suggests, the dopamine reward system involves the neurotransmitter dopamine and is sometimes called the brain’s ‘pleasure centre’.

As shown in figure 6.19, the dopamine reward system is located beneath the cerebral cortex in the midbrain area. It has connections that extend to the cerebral cortex and other brain areas. Reward results from activation of dopamine producing neurons within the pathway. When dopamine is released, it is experienced as a feeling of pleasure and sometimes euphoria. Connection to the prefrontal cortex ensures we pay attention to and notice the pleasure. Studies have found that anticipation of receiving a reward is sufficient to activate the release of dopamine.

FIGURE 6.19 The dopamine reward system is a neural pathway located in the midbrain area. It runs from the ventral tegmental area, through the medial forebrain bundle, to the nucleus accumbens and there are connections to other areas, including the prefrontal cortex. Neurons within it are activated by dopamine. When stimulated, the dopamine reward system produces a pleasurable experience.

LEARNING ACTIVITY 6.9

Review questions
1 Explain the meaning of addiction, with reference to potentially addictive behaviours and substances.
2 Distinguish between:
   (a) psychological and physiological dependence
   (b) tolerance and withdrawal.
3 Explain why addiction is considered to be maladaptive.
4 Explain what gambling is with reference to an example.
5 Draw a continuum for gambling disorder using the DSM criteria for severity.
6 Under what circumstances would the following behaviours be considered an addiction disorder? Explain your answers.
   (a) Body building  (b) Jogging  (c) Gambling
7 Which DSM-5 symptoms of gambling disorder do each of the following people exhibit:
   (a) Leon has a very stressful life. He works 15 hours a day, six days a week. However, when he is sitting in front of a poker machine, nothing else matters and he’s able to forget about his stressful life for a while.
   (b) In order to continue gambling, Selina has stolen money from friends and borrowed money from family members under false pretences. She never tells anyone the truth about how much she has lost on gambling. She always tells everyone that she ‘broke even’.
   (c) Samir has just lost $15 000 on gambling. He thinks, ‘I’ve gotta get back my $15 000. If I win the money back everything will be alright’, so he goes back to the roulette table. This time he tells himself that if he recovers the $15 000 he will stop for good. However, Samir loses another $1000.
Neuroimaging techniques have shown that gambling for a monetary reward, especially on poker machines, activates the dopamine reward system. Because a win, and therefore the reward, is never predictable, every instance of a payoff results in a new burst of dopamine into the brain, no matter how many times the person plays (Gray, 2007).

Research evidence also shows that gambling addiction may be partially due to excessive dopamine activity. Some of this evidence comes from studies on Parkinson's disease, which is associated with a deficiency of dopamine in the brain. Treatment therefore involves increasing dopamine levels in the brain using medications such as levodopa.

Several studies have reported a relationship between the use of dopamine medications for Parkinson's disease and the development of a serious gambling problem, suggesting that an excess of dopamine could be responsible (at least in some of the cases). For example, in one study, 11 people with Parkinson's disease all became addicted to gambling after starting treatment with medications containing high doses of a dopamine, seven within three months. The results also showed that gambling stopped in 8 out of the 11 participants when the dopamine medication was reduced or discontinued (Dodd et al., 2005). Precisely how medications that promote dopamine lead some people with Parkinson's disease to develop a gambling addiction remains unclear.

Psychological — production or release distorted ways of thinking

Cognitive distortions are inaccurate thoughts, beliefs and attitudes; for example, a thought that is irrational (illogical), exaggerated, extreme and/or not consistent with what is actually going on in the real world. Many people with a gambling addiction have been identified as having one or more cognitive distortions. Most are unaware of these flawed ways of thinking that lead them to make errors of judgement and bad decisions. Two of the most common cognitive distortions held by people with gambling addictions are illusions of control and the gambler's fallacy. Both lead to flawed decision making and maintain their behaviour.

Illusion of control

An illusion of control refers to the mistaken belief (‘illusion’) that the outcomes of random, unpredictable events can be influenced or controlled by one's thoughts or actions. It is believed that there is a way to ‘beat the odds’ or ‘beat the system’, when in fact the outcome is completely unpredictable and whatever the individual does will not actually influence the outcome.

Examples that demonstrate an illusion of control include:

- ‘willing’ a winning result through mental effort
- talking to and touching a poker machine in a certain way
- choosing specific TattsLotto numbers in preference to computer-generated ‘quick pick’ numbers
- revealing the cards slowly one at a time after having been dealt a hand in poker
- blowing on dice before throwing them when playing the game of craps.

Although these types of ‘strategies’ are illogical, and the gambler may be aware of this, they persist with their use, usually attributing failure to ‘bad luck’.

The gambler’s fallacy

People with a gambling addiction also tend to incorrectly believe that outcomes are predictable, irrespective of the laws of probability that actually apply. This belief involves what is commonly called the gambler’s fallacy. The gambler’s fallacy refers to the mistaken belief that in a series of independent chance events, future events can be predicted from past ones.

The gambler’s fallacy is often illustrated with coin tosses. For example, if a coin is tossed in the air and comes down heads ten times in succession, it is believed that there is an increased chance of the coin coming down tails on the next toss. This, however, is incorrect (assuming the toss of the coin is fair). If two events are independent of one another, then one event does not affect the occurrence of the other. Each toss of the coin is entirely independent of the previous toss (or tosses). Even though the gambler may have a memory of the previous coin toss, the coin does not. The chance of getting heads (or tails) on any given toss is the same (1:2 or 50%) regardless of what happened in a previous toss, including situations in which heads may have come up ten times in a row.
Gamblers who believe in the gambler’s fallacy also believe, for example, that in roulette certain numbers are ‘due’ because they haven’t come up for a while, and that the chance of winning on a particular poker machine depends on how recently someone else won on that machine. These gamblers therefore bet on roulette numbers that are ‘due’ in the mistaken belief that those numbers must eventually come up or they play a particular poker machine ‘because it hasn’t paid all day’ and must therefore be due to pay out.

The perception that gambling is socially acceptable has an influential effect in determining the rate and frequency of gambling among different sectors of the population. Research evidence suggests that the number of people in any given community who actively participate in a gambling activity is related to the promotion, accessibility and availability of gambling outlets (Rickwood et al., 2010).

Research evidence also shows that younger Australians are more likely to perceive gambling as socially acceptable. The perception of social acceptability encourages young people to try gambling at some stage and is a significant predictor of youth gambling frequency in Australia. Social acceptability also decreases the likelihood of negative consequences being associated with regular gambling. For example, a young person is more likely to engage in regular gambling if their family and friends actively gamble and promote positive values and attitudes about gambling (Moore & Ohtsuka, 1997; Ohtsuka & Maddern, 1999; Productivity Commission, 2010).

**Treatment**

The most effective treatment for a gambling addiction adopts a biopsychosocial approach so that the full range of contributing factors can be addressed. This helps ensure that other possible physical and mental health problems are also considered. For example, addictive gambling is more common among people with poor physical health and/or who have another mental disorder such as one involving substance use, depression, anxiety or personality disorder.

Only a small proportion of people with a gambling addiction seek professional help. Many refuse to recognise or accept that they have a problem or that there are negative consequences of their addiction. Other reasons include feelings of guilt, shame, a concern about social stigma, and the belief that they can resolve their gambling problems without professional help (American Psychiatric Association, 2013; Productivity Commission, 2010).

Most of those who do seek treatment have either ‘hit rock bottom’ or are coming close. For example, a person may not seek help until they are facing financial ruin, a relationship breakdown, serious work-related issues, deterioration of physical health, deterioration of psychological health (e.g. attempted suicide) or legal charges linked to their gambling activities.

The main forms of treatment for a gambling addiction involves psychological therapy and social support. Medication that targets the dopamine reward system can in some cases decrease the frequency of gambling behaviour but as yet there is no ‘magic pill’. There are also concerns about the side effects of existing medications. Consequently, medication tends to not be a preferred option in the treatment of a gambling addiction.
Cognitive behavioural therapy (CBT) is most frequently used. As the name suggests, it combines cognitive and behavioural therapies. A core assumption of cognitive behavioural therapy is that the way people feel and behave is largely a product of the way they think. Therefore, CBT is used to help the person become aware of their faulty thinking when gambling, and then to develop more accurate thoughts, beliefs and attitudes about playing and winning games of chance.

It is common for someone with a gambling addiction to report that the urge to gamble is overwhelming and beyond their control, once it has been triggered. Therefore, the person will also be assisted to learn and use techniques to manage the tension, anxiety or arousal that may be associated with their desire to gamble. In addition, improved problem-solving skills can help individuals use strategies to refuse gambling opportunities and to deal with gambling urges, decide limits on the time and money spent gambling, resolve difficulties with family members and find suitable solutions to gambling debts.

Support is also available through support groups that may be accessed in the local and wider community, through attendance or online. A support group is a group who interact on the basis of common interests or experiences to provide mutual support. They are mostly organised and/or ‘run’ by a person who has experienced or recovered from the mental disorder that is the focus of the group, or by someone affected by it, such as a close relative. Online support groups enable access to others and information through services such as live chat Facebook pages, conference calls, forums and blogs. These are often established and conducted by not-for-profit organisations.

A key assumption of support groups run for people with a gambling addiction is that recovery is possible. The goal of recovery usually involves drawing on each other's experiences to develop problem-solving skills for self-management of the addiction in a gradual step-by-step recovery (O'Brien, Kennedy & Ballard, 2007).

**BOX 6.6**

Gamblers Anonymous

One of the best-known support groups for people with a gambling addiction is Gamblers Anonymous. Gamblers Anonymous (GA) was founded in Los Angeles, California in 1957 and has established itself worldwide as a resource for people struggling with gambling problems. GA offers a self-help program for anyone with a gambling problem. The only requirement for GA membership is a desire to stop gambling. The program involves confidential group meetings, which are held in local community centres and church halls and go for 90 minutes. There are no compulsory fees or charges. GA follows a 12-step recovery program based on the following principles.

1. We admitted we were powerless over gambling — that our lives had become unmanageable.
2. We came to believe that a Power greater than ourselves could restore us to a normal way of thinking and living.
3. We made a decision to turn our will and our lives over to the care of this Power of our own understanding.
4. We made a searching and fearless moral and financial inventory of ourselves.
5. We admitted to ourselves and to another human being the exact nature of our wrongs.
6. We were entirely ready to have these defects of character removed.
7. We humbly asked God (of our understanding) to remove our shortcomings.
8. We made a list of all persons we had harmed and became willing to make amends to them all.
9. We made direct amends to such people wherever possible, except when to do so would injure them or others.
10. We continued to take personal inventory and when we were wrong, promptly admitted it.
11. We sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.
12. Having made an effort to practise these principles in all our affairs, we tried to carry this message to other compulsive gamblers.

The initial steps in recovery from a gambling addiction include admitting to powerlessness over the urge to gamble and surrendering to a ‘higher power’, which members can interpret according to their own beliefs. This is why members of GA often introduce themselves to other members at meetings with an admission of their problem; for example, ‘Hi, I’m Vinnie and I’m a problem gambler’. Another key feature of GA is having a ‘sponsor’. A sponsor is a former problem gambler who has abstained from all gambling whatsoever and can provide guidance and assistance to the member throughout their recovery process.

**FIGURE 6.22** An individual with a gambling addiction often refuses to recognise or accept that they have a problem. When challenged, they can come up with an endless variety of reasons to justify their gambling.
ANXIETY DISORDERS

We all experience anxiety from time to time and in moderate degrees. In everyday life, anxiety is an adaptive response. Mild to moderate levels of anxiety improve our ability to cope, our reactions can become faster, our understanding better and our responses more appropriate. It is anxiety that can prompt us to do our homework, study for an exam, seek medical advice when an unusual skin blemish appears, be wary when too high up a ladder, and to avoid other dangerous situations.

In psychology, anxiety is defined more specifically as a state of arousal involving unpleasant feelings of apprehension or uneasiness that something is wrong or something bad is about to happen. The focus of anticipation may be internal or external. It is accompanied by psychological, behavioural and physiological responses such as ‘nervousness’, worry, uncertainty, change in mood, negative thinking involving loss of control and ability to cope, difficulty concentrating and paying attention, excessive fear, upset stomach or nausea, racing heart, rapid breathing, muscle tension, inability to relax, and poor sleep.

Anxiety is a term which describes a feeling people experience when faced with threat, danger or feeling stressed. Although fear can be experienced with anxiety, and both fear and anxiety can trigger the same responses, psychologists distinguish between them. Fear is an emotional reaction to something real which is present or anticipated and is perceived to threaten our wellbeing. For example, you are likely to experience fear when confronted by a snarling, vicious looking big dog. In contrast, anxiety is a reaction to the anticipation of a future threat. The threat is often vague or unknown and the reaction tends to be longer-lasting than fear (American Psychiatric Association, 2013; Ohman, 2010).

**FIGURE 6.23** Anxiety involves a feeling of apprehension that something is wrong or something bad is about to happen.
It is normal to be anxious before important events, but the anxiety should not become so severe that it impairs performance. High levels of anxiety can reduce our capacity to plan, to make accurate judgements, to carry out skilled tasks, or even to understand information. While most people feel anxious sometimes, some people feel anxious most of the time. For these people, anxiety is not an adaptive response. It is a source of extreme distress and can indicate an anxiety disorder.

Anxiety disorders are the most frequently experienced and diagnosed of all the mental disorders, commonly occurring with other mental disorders. **Anxiety disorders** are characterised by persistent feelings of tension, distress, nervousness and apprehension or fear about the future, with a negative effect. A person with an anxiety disorder will feel uneasy and distressed a lot of the time for no apparent reason.

Individuals with an anxiety disorder do not lose touch with reality or behave in socially unacceptable ways. However, the anxiety is severe enough to interfere with their functioning, making it difficult for them to cope with the normal demands of everyday life. In some cases, an episode of high anxiety can be so severe it is immobilising.

**Types of anxiety disorders**
The DSM-5 describes different types of anxiety disorders in this category. All have several common symptoms. Anxiety disorders include:

- **Generalised Anxiety Disorder** — persistent, excessive or unrealistic anxiety and worry. Adults often worry about everyday life circumstances such as health and finances, job responsibilities and their children's safety, or minor matters such as household chores or being late for an appointment. Children tend to worry about their abilities and how well they can do things. Individuals typically find it difficult to prevent or control worry, and they experience worry as being excessive and unreasonable anxiety.

- **Panic Disorder** — recurring, unexpected panic attacks involving a surge of intense fear or anxiety. A panic attack tends to occur suddenly ('out of the blue') for no apparent reason in situations when most people would not be afraid, such as when relaxing, awakening, gardening or shopping. Panic attacks often last only a few minutes, but repeated episodes may continue to occur.

According to the DSM, a panic attack is diagnosed when at least four of the following symptoms occur abruptly and reach a peak within minutes: palpitations, pounding heart, or accelerated heart rate; sweating; trembling or shaking; sensations of shortness of breath or smothering; feelings of choking; chest pain or discomfort; nausea or abdominal distress; feeling dizzy, unsteady, lightheaded, or faint; chills or hot flushes; numbness or tingling sensations; derealisation (feelings of unreality) or depersonalisation (being detached from oneself); fear of losing control or going crazy; fear of dying.

- **Specific Phobia** — excessive, persistent and unreasonable fear of a specific object or situation, such as flying, heights, spiders, dentists, receiving an injection, and seeing blood. The phobic object or situation almost always triggers fear or anxiety and is intentionally avoided or endured with intense anxiety if avoidance isn't possible. The level of fear or anxiety is out of proportion to the actual danger posed and causes significant distress.

- **Social Anxiety Disorder (Social Phobia)** — excessive, persistent and unreasonable fear of social and performance situations, primarily due to concern about being negatively judged by others (e.g. anxious, weak, stupid, boring, unlikeable), and fear of behaving in a way that offends others or is embarrassing or humiliating (e.g. sweating, trembling).

- **Agoraphobia** — excessive, persistent and unreasonable fear of a situation in which it is believed something terrible may happen and that escape might be difficult or help might not be available if needed. Agoraphobic situations may include using public transport, being in an open space area (e.g. in a car park, on a bridge), being in an enclosed space (e.g. shop, movie theatre, lift), standing in a line, being in a crowd and being outside of the home alone (e.g. in the back yard). These situations are avoided, require the presence of a companion or are endured with intense fear or anxiety.

- **Separation Anxiety Disorder** — excessive fear or anxiety about separation from attachment figures to a degree that occurs at a developmentally inappropriate time. There is excessive worry, for example, about the wellbeing or death of the attachment figure when separated from them or something bad happening to themselves when alone. There is also a strong desire to know where the attachment figure is and how to stay in touch.

- **Selective Mutism** — a childhood disorder involving consistent failure to speak in social situations in which there is an expectation to speak (e.g. at school) even though the individual speaks in other situations.

In this section we focus on biological, psychological and social factors that influence development and treatment of many anxiety disorders, with particular reference to phobias.
Contributing factors

Some anxiety disorders appear to be linked to a single event. For example, a specific phobia involving spiders could be traced back to a distressing experience with a spider at some previous time. However, many people can have a distressing experience involving a spider and not develop a phobia. This suggests that the development of an anxiety disorder is unlikely to be due to one event or factor alone.

As with other mental disorders, anxiety disorders are best understood from a biopsychosocial perspective. Many factors have been proposed as risk factors and therefore contributing to the development of anxiety disorders. For a phobia, these include biological factors (such as an over-reactive physiological response to stress and imbalances in brain chemistry), psychological factors (such as faulty thinking) and social factors (such as transmission of threat information and parental modelling).

Biological — stress response and brain chemistry

There is research evidence that some people experiencing an anxiety disorder involving a phobia have an over-reactive autonomic nervous system response when there is a perceived threat. This is a physiological stress response that is automatically initiated by the sympathetic nervous system. Sometimes called the fight–flight response, the response can be activated by the sight or thought of an anxiety-provoking object or situation, even when there is no actual danger.

Bodily changes that occur with the stress response account for many of the physiological symptoms associated with many anxiety disorders, such as palpitations resulting from a pounding heart or accelerated heart rate, and sweating due to increased perspiration. Feeling dizzy or even fainting are believed to be the result of an initial increase in autonomic nervous system arousal followed by a sudden drop in blood pressure and heart rate.

There is also evidence that an imbalance in brain chemistry involving the neurotransmitter called GABA may contribute to anxiety disorders, particularly phobias. GABA helps regulate nervous system arousal and physical reactions when aroused. A low level can result in heightened activity of the nervous system and contribute to an over-reactive stress response and exaggerated anxiety symptoms.

Psychological — learning processes and faulty thinking

Learning processes can significantly influence the development and onset of a phobia. One learning process that has been widely studied is called conditioning. Classical conditioning can contribute to the development of a phobia and operant conditioning to its maintenance. During classical conditioning, an object that is originally neutral in that it causes no fear or anxiety (e.g. a butterfly) becomes paired with a frightening event (a sudden panic attack) so that it becomes a conditioned stimulus that triggers anxiety. Anxiety then becomes an automatically occurring conditioned response whenever a butterfly is encountered. The person then begins to avoid butterflies in order to reduce the anxiety. The anxiety reduction is a reward for avoiding butterflies (negative reinforcement) so avoidance behaviour is maintained through the process of operant conditioning (see figure 6.25). People with phobias tend to develop faulty thinking habits that can make them more prone or vulnerable to experiencing fear and anxiety. For example, their fear and anxiety are usually based on negative thoughts about the anxiety-provoking object or situation. These negative thoughts are typically unreasonable and unjustifiable. People with phobias are often aware of this but it makes no difference to how they react.

They also tend to engage in catastrophic thinking, a type of negative thinking in which an object or situation is perceived as being far more threatening, dangerous or insufferable than it really is and will result in the worst possible outcome. For example, a person with agoraphobia may think that if they go outside to the letterbox to get the mail, the front door may close and lock them out of the house and they will be exposed to all types of danger with no one around to help.

When catastrophic thinking occurs, individuals experience heightened feelings of helplessness and grossly underestimate their ability to cope with the situation. For example, a person may think
‘if this dog turns towards me, there is nothing I can do to stop it from attacking me’. Equally, they may believe that they will be completely unable to cope with the symptoms of anxiety they may experience; for example, ‘if I faint, I may never regain consciousness’.

People with a phobia also tend to be hypervigilant — they are always alert and constantly looking around for signs of danger while ignoring signs of safety. This is like having a radar specifically set to scan the environment and detect information relevant to the anxiety-provoking object or event. For example, when reading a newspaper, someone with a phobia of flying will notice a small article on delays at the airport due to bad weather that most other people may overlook. Hypervigilant behaviour is not helpful. Instead, it tends to maintain the disorder and its symptoms.

Social — transmission of threat information and parental modelling

Many and varied social factors have been proposed as contributing to the development of anxiety disorders. For example, phobias can result from transmission of threat information within the individual’s environment and modelling of reactions by one or both parents to an object or event.

Transmission of threat information refers to the delivery of information from parents, other family members, peers, teachers, the media and other secondary sources about the potential threat or actual danger of a specific object or situation. Children are most vulnerable to the transmission of threat information, particularly from parents. For example, parents may communicate their fear and anxiety directly to the child (e.g. ‘Don’t touch the broken glass because it’s dangerous’). The child may also hear their parents communicate their fear and anxiety to another individual (e.g. their partner) or aloud to themselves (e.g. ‘That was so frightening I can’t stop shaking’).

Children also commonly reproduce or imitate their parents’ behaviour. For example, a child with no fear of mice may learn that a mouse should be feared after observing a parent’s extreme fearful reaction when they saw a mouse running across the room. Fears developed through parental modelling can be just as strong as fears developed through direct, personal experience.

Treatment

There are many mental health professionals and services available to help with anxiety disorder information, treatment and support. Effective treatment helps people with recurring anxiety to learn how to control the condition so it doesn’t control them. The type of treatment will depend on the anxiety disorder being experienced and its severity. In most cases, psychological and/or medical treatments are likely to be required (beyondblue, 2015a).

Cognitive behaviour therapy (CBT) is often used for anxiety disorders. This approach targets the faulty thinking underlying the disorder and assists people to change their negative, maladaptive thoughts into more realistic ones. When someone with an anxiety disorder develops a more appropriate way of thinking about events in their life, it enables them to take greater control over their feelings and behaviour, and feel less anxious. For example, CBT can help people with a phobia understand that a feared object or event is not actually dangerous, so their avoidance behaviour is unnecessary. When treating a phobia, the individual may also be gradually exposed to the feared object or situation, starting with low to moderately stressful stimuli. Relaxation and controlled breathing skills are also often taught to people with an anxiety disorder as a way of keeping their anxiety under control.

Anti-anxiety medications may also be used to help treat the symptoms. They can be effective in providing relief from symptoms and do so quickly; however, they can have side effects including impaired cognitive functioning, drowsiness and lethargy. With prolonged use, some of these medications can cause physical and/or psychological dependence, as well as withdrawal symptoms when they’re stopped. When medication is stopped, the original symptoms often return. Therefore mental health professionals often combine medication with psychological therapy in the treatment of anxiety disorders (beyondblue, 2015a).

### LEARNING ACTIVITY 6.11

#### Review questions

1. Explain the meaning of the term anxiety.
2. Give an example of when anxiety may be beneficial.
3. Give an example of when anxiety may be potentially harmful.
4. Distinguish between fear and anxiety.
5. Explain the meaning of the anxiety disorder with reference to two examples of this type of disorder.
6. In what way is the anxiety experienced as a ‘normal’ part of everyday life different from the experience of anxiety that characterises an anxiety disorder?

7. Give an example of each of the three different types of factors that may contribute to the development of a phobia and explain their potential effect on development.

8. (a) Visit the beyondblue website and outline three sources of support for an anxiety disorder that are not discussed in this chapter. Include an example of an online support centre. (b) Identify another reputable support service for anxiety disorders and how their services are accessed.
The DSM-5 describes three broad types of mood disorder — those that involve only symptoms of depression, those that involve symptoms of mania and those that involve alternating episodes of depression and mania.

**Depression** is a lasting and continuous, deeply sad mood or loss of pleasure. It is characterised by symptoms such as feelings of worthlessness, failure and guilt, no confidence, withdrawal from close family and friends, fatigue and changes in sleep habits and appetite. In contrast, mania can be considered to be the opposite of depression.

**Mania** is an elevated mood involving intense elation or irritability. It is characterised by symptoms such as being overly excited, extremely active, talking excessively and being easily distracted. The person also tends to have an unrealistically high opinion of themselves and their abilities, an inflated sense of importance and insensitivity to the negative consequences of their actions. There is a decreased need for sleep, and, in some cases, the person may not sleep for days at a time, yet does not become fatigued. Thinking is speeded up and can switch abruptly between topics, making it hard to follow their train of thought. Speech also tends to be rapid and it can often be difficult for others to get a word in.

**Hypomania** is an extremely happy or irritable mood like mania, but its experience is not as intense as mania and often there are not as many symptoms.

When mood fluctuates, or ‘swings’, between depression and mania, this is called bipolar disorder (once called manic-depressive disorder). Mood changes between the two extremes of bipolar disorder are often unrelated to the individual’s current situation and whatever they are thinking, feeling or doing at the time.
Types of mood disorders
Mood disorders described in this DSM category include:

- **Major depressive disorder** A depressed mood for at least two weeks during which the individual feels sad or miserable most of the time or has lost interest or pleasure in most of their usual activities most of the day nearly every day and four or more symptoms that occur nearly every day, such as feeling tired and run down all the time, feeling irritable, sleep problems, loss or change of appetite, significant weight loss or gain, feeling worthless or excessively guilty, difficulties concentrating, thinking and making decisions. There may also be recurrent thoughts of death or suicide. The disorder is more commonly called major depression or simply depression.

- **Dysthymia** The symptoms are similar to those of major depression but less severe. However, the depressive symptoms last longer. A person has to have this milder depression for more than two years to be diagnosed with the disorder. Because it is longer lasting, it is also called persistent depressive disorder.

- **Premenstrual Dysphoric Disorder** Depressive and other mood or physical symptoms in the week before the onset of the menstrual cycle; for example, mood swings, feeling suddenly sad or tearful, feeling overwhelmed or loss of control, increased sensitivity to rejection, irritability or anger, feelings of hopelessness, sleep problems and decreased interest in usual activities. Symptoms improve when menstruation starts and gradually decrease.

- **Bipolar I disorder** Characterised by episodes of major depression and mania.

- **Bipolar II disorder** Characterised by fluctuations between episodes of major depression and hypomania.

- **Cyclothymia** Experience periods of manic symptoms and depressive symptoms over at least two years. Involves recurring mood changes without actually experiencing a manic or depressive episode. The duration of the symptoms are shorter, less severe and not as regular, and therefore do not fit the criteria of major depressive or bipolar disorder. It is also called cyclothymic disorder and often described as a milder form of bipolar disorder.

In this section, we focus on major depression and consider biological, psychological and social factors that influence its development and treatment.

![Visual representation of various types of moods and mood disorders described in the DSM](image-url)
BOX 6.7

Signs and symptoms of depression

A person may be depressed if, for more than two weeks, he or she has felt sad, down or miserable most of the time or has lost interest or pleasure in usual activities, and has also experienced several of the signs and symptoms across at least three of the categories below.

It’s important to note that everyone experiences some of these symptoms from time to time and it may not necessarily mean a person is depressed. Equally, not every person who is experiencing depression will have all of these symptoms.

Behaviour
- not going out any more
- not getting things done at work/school
- withdrawing from close family and friends
- relying on alcohol and sedatives
- not doing usual enjoyable activities
- unable to concentrate

Feelings
- overwhelmed
- guilty
- irritable
- frustrated
- lacking in confidence
- unhappy
- indecisive

Thoughts
- ‘I’m a failure.’
- ‘It’s my fault.’
- ‘Nothing good ever happens to me.’
- ‘I’m worthless.’
- ‘Life’s not worth living.’
- ‘People would be better off without me.’

Physical
- tired all the time
- sick and run down
- headaches and muscle pains
- churning gut
- sleep problems
- loss or change of appetite
- significant weight loss or gain

If you think that you, or someone you know, may have depression, there is a quick, easy and confidential checklist you can complete at the beyondblue website to give you more insight. The checklist will not provide a diagnosis; for that you need to see a health professional.


LEARNING ACTIVITY 6.13

Review questions

1. Explain the meaning of the term mood.
2. Explain the meaning of the term mood disorder with reference to two examples of this type of disorder.
3. Distinguish between depression and mania.
4. List the criteria for a diagnosis of major depressive disorder with reference to examples of a range of different types of symptoms.
5. Consider the descriptions of major depressive disorder, dysthymia and cyclothymia. Should these be viewed as points along a depression continuum rather than distinct disorders? Explain your answer.
Contributing factors
There is no known single cause of mood disorders. Research investigating possible causes of the different types of mood disorders has primarily focused on depression as this is the most common type of mood disorder. Many different factors have been proposed as risk factors or contributing to its development. These include biological factors (such as genetic influence and imbalances in brain chemistry), psychological factors (such as psychological responses to stress and dysfunctional ways of thinking) and social factors (such as poverty and social stress). As proposed by the biopsychosocial model, depression (or any other mood disorder) cannot be explained by a single factor or event. It is best understood in terms of the interaction of different influences.

Biological — genes and brain chemistry
Research studies of families, twins and adopted children living with non-biological parents show that depression has a genetic component. These studies have found that depression tends to run in families, which puts some people at an increased risk. For instance, major depression is about one-and-a-half to three times more common among biologically related people than among non-biologically related people in the general population (American Psychiatric Association, 2000). If one parent has major depression, the risk to one of their offspring of developing major depression at some time in their life has been found to be about a 25–30% chance. When both parents have major depression, the risk rises to about a 70% chance (Ainsworth, 2000).

LEARNING ACTIVITY 6.14
Analysis of twin study data on major depression
Consider the data in figure 6.28 and answer the following questions:
1. Write a suitable title for the graph.
2. Briefly describe the sample used and its composition.
3. How were major depression and stress operationalised?
4. On the basis of the results shown, write a conclusion on the role of both the following factors in major depression, ensuring that you refer to relevant data:
   - genes
   - stressful life events.

The existence of a genetic component does not mean that an individual will automatically become depressed if a biological parent or close relative has had the disorder (beyondblue, 2015b). Other biological factors, as well as psychological and social factors, still have an important influence on its development. In addition, these factors may also influence gene activity or expression.

Another biological factor that can contribute to major depression is depleted amounts of certain neurotransmitters. In particular, the neurotransmitters serotonin and noradrenaline have been found to be involved in mood disorders and therefore major depression. By contrast, mania is assumed to be caused by an oversupply of these brain chemicals. However, the precise role that a deficiency in serotonin and/or noradrenaline may play in depression is still not fully understood.
Psychological — psychological responses to stress and dysfunctional ways of thinking

Many research studies have found that major depression may develop as a consequence of exposure to stressful life experiences. The experiences that appear to be most often associated with major depression are those that involve a loss that can significantly disrupt everyday life in an ongoing way; for example, those related to marriage and romantic relationships (e.g. breaking up), work (e.g. losing a job) and personal trauma (e.g. being diagnosed with a life-threatening illness). Such experiences severely interrupt our everyday life and impact on our well-established 'routine' ways of satisfying our needs and desires.

People with major depression also think differently to people who do not have major depression. In particular, they habitually think in negative ways. These negative thoughts tend to automatically 'pop up' in response to a specific event and can influence both mood and behaviour. For example, straight after finishing an exam, a person might think 'I bet I've failed that', 'I'm no good at exams' or 'I really am stupid'. These negative automatic thoughts will lower the person's mood, which, in turn, increases the probability of more thoughts of this type, thereby producing a vicious cycle that tends to maintain the depression. The behaviour resulting from these negative automatic thoughts might include going home rather than going out to celebrate with school friends after the exam. In contrast, other students may have thought they did well (a positive automatic thought) and others might not have been thinking about the possible outcome and are just happy to have the exam over with (neutral automatic thought), both of which would not lower the person's mood.

Psychologists have described a direct relationship between the amount and severity of someone's habitual negative thoughts and the severity of their depressive symptoms. This means that the more negative thoughts a person has, and the more the person believes them, the more depressed they will become.

**Figure 6.29** Some people can simply 'shrug off' daily hassles as they arise. For others, however, their effects can accumulate and contribute to the development of major depression.
Social — poverty and social stress

Poverty describes the situation for people who lack the basic necessities of life to the extent that they are unable to meet minimum standards of wellbeing. For example, they do not have adequate resources to guarantee or maintain access to basic necessities such as food, water, shelter and clothing, acceptable levels of health and education, and freedom from excessive vulnerability to situations that create stress or intensify the stress already being experienced.

Research evidence shows that poverty is strongly associated with major depression. People in poverty are more likely to be depressed than those who are not in poverty. However, psychologists continue to debate whether being in poverty can result in the development of major depression or whether having major depression can result in poverty due to an inability to fully participate in society.

Research evidence also shows a relationship between social stress and major depression. Social stress is produced by our relationships with others and from our wider social environment. For example, the stress may occur through:

- problems with friends, family, work colleagues or a partner
- not 'getting on' with someone during groupwork at school because they aren't contributing
- being harassed or bullied by someone.

Difficulties in interpersonal relationships, particularly those that are ongoing problems, can lead to a sense of helplessness or hopelessness about one's ability to negotiate and resolve difficult interpersonal situations. This seems to be particularly the case for women, as interpersonal relationships are, on average, both more central to and more valued by women than by men (Hersen & Thomas, 2005; Kendler, Myers & Prescott, 2005).

The absence of social contact, interactions and relationships with others may also result in depression. Research evidence shows a relationship between social isolation and major depression. This has been obtained through studies with both animals and humans. For example, Australian psychologist Graeme Hawthorne (2008) conducted research on the prevalence of perceived social isolation among a sample of 3015 adult Australians. A key finding of his study was that people who reported feeling socially isolated were highly likely to be experiencing major depression. In addition, people who were living alone were twice as likely to have major depression when compared to those living with others.

**FIGURE 6.30** Poverty is an enforced lack of basic necessities of life. In Australian society, poverty is usually measured in terms of economic resources, particularly level of income.
BOX 6.8

A cross-cultural comparison of public beliefs about causes and risk factors for major depression

Mental health professionals and researchers view major depression as having complex causes involving an interplay of biological, psychological and social factors. However, the public’s beliefs about causes are generally less sophisticated. Studies from Australia, Ireland, Germany, Switzerland, the UK and the USA have all found that social factors were most often seen as the causes of major depression, whereas genetic factors were much less frequently identified. Social factors covered in these studies included stressful life events, traumatic experiences, family problems and social disadvantage.

In one cross-cultural study, people in Australia and Japan were surveyed on the possible causes and risk factors in relation to two scenarios. One scenario described a person with major depression and the other scenario described a person with major depression and suicidal thoughts. In Japan, the survey involved 2000 adults aged between 20 and 69 from 25 regional areas. In Australia, the survey involved a national sample of 3998 adults aged 18 years or over.

**TABLE 6.4** Percentage of Japanese and Australian populations to endorse proposed explanations as ‘likely’ or ‘very likely’

<table>
<thead>
<tr>
<th>Cause</th>
<th>Major depression</th>
<th>Major depression with suicidal thoughts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virus or infection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Japan</td>
<td>6.2</td>
<td>6.6</td>
</tr>
<tr>
<td>• Australia</td>
<td>50.5</td>
<td>41.4</td>
</tr>
<tr>
<td>Allergy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Japan</td>
<td>10.2</td>
<td>11.4</td>
</tr>
<tr>
<td>• Australia</td>
<td>44.9</td>
<td>37.6</td>
</tr>
<tr>
<td>Day-to-day problem</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Japan</td>
<td>93.6</td>
<td>91.8</td>
</tr>
<tr>
<td>• Australia</td>
<td>96.8</td>
<td>95.7</td>
</tr>
<tr>
<td>Death of someone close</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Japan</td>
<td>79.8</td>
<td>81.4</td>
</tr>
<tr>
<td>• Australia</td>
<td>91.3</td>
<td>94.8</td>
</tr>
<tr>
<td>Traumatic events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Japan</td>
<td>82.6</td>
<td>79.6</td>
</tr>
<tr>
<td>• Australia</td>
<td>93.9</td>
<td>92.7</td>
</tr>
<tr>
<td>Problems from childhood</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Japan</td>
<td>81.0</td>
<td>82.0</td>
</tr>
<tr>
<td>• Australia</td>
<td>91.3</td>
<td>95.0</td>
</tr>
<tr>
<td>Inherited or genetic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Japan</td>
<td>34.6</td>
<td>34.0</td>
</tr>
<tr>
<td>• Australia</td>
<td>68.0</td>
<td>68.4</td>
</tr>
<tr>
<td>Nervous person</td>
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<td></td>
</tr>
<tr>
<td>• Japan</td>
<td>81.4</td>
<td>77.4</td>
</tr>
<tr>
<td>• Australia</td>
<td>67.9</td>
<td>65.6</td>
</tr>
<tr>
<td>Weakness of character</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Japan</td>
<td>73.6</td>
<td>69.2</td>
</tr>
<tr>
<td>• Australia</td>
<td>43.0</td>
<td>46.1</td>
</tr>
</tbody>
</table>


**Treatment**

There is a range of effective treatments to help people with depression and other mood disorders. There are also many things that people with a mood disorder can do for themselves to help recovery and stay well. The important thing is finding the right treatment and the right health professional for the individual's needs (beyondblue, 2015c). The type of treatment will depend on the mood disorder being experienced and its severity. In most cases, psychological and/or medical treatments are likely to be required.

People with major depression habitually think in negative ways and many of their thoughts are often distorted and unjustifiable. These cognitive distortions and biases maintain their depression, so a commonly used psychological treatment involves assisting them to identify and change thoughts and behaviours responsible for maintaining their symptoms. This can be achieved through psychological therapy such as CBT.

Antidepressant medications may also be prescribed to relieve some of the symptoms. They are commonly prescribed alongside the use of psychological therapy. They are also prescribed when other treatment strategies have not been helpful or psychological therapy is not possible due to the severity of the disorder or the lack of access to therapy.

Antidepressants can relieve symptoms and make people feel better, but taking them does not change a person's personality or make them feel endlessly or artificially happy. As with any other medication, some people who take antidepressants also experience side effects. Many of these side effects are short-term and well tolerated.

Common side effects can include nausea, headaches, anxiety, sweating, dizziness, agitation, weight gain, difficulties sleeping and loss of appetite. The actual side effects that are experienced vary according to such factors as the specific type of antidepressant, the dosage, the individual's condition and their age. Antidepressants are considered to not be addictive but suddenly stopping their use can result in the experience of withdrawal symptoms, such as anxiety, headaches and a ‘flu-like’ feeling (beyondblue, 2015c).

In addition to psychological therapy and medical treatment to assist management of major depression, support may be provided through an individual's family or wider social network, as well as through support groups that may be accessed in the local and wider community.

Family members and friends play an important role in a person's recovery. They can offer support, understanding and help. People with depression often don't feel like socialising, but spending time alone can make a person feel cut off from the world, which makes it harder to recover. That's why it's
important for them to take part in activities with family members and close friends, and to accept social invitations, even though it’s the last thing they may want to do. Staying connected with people helps increase levels of wellbeing, confidence and the chance to participate in physical activities.

There are support groups for people with depression that are conducted by people who have experienced similar problems. These groups can provide an opportunity to connect with others, share experiences and find new ways to deal with difficulties. There are also online forums for sharing personal stories and other information, or to seek and access support (beyondblue, 2015c).

**BOX 6.9**

**Electroconvulsive therapy (ECT)**

Hundreds of thousands of prescriptions are written for antidepressant medications in Australia every year. In contrast, a small number of individuals with severe depression receive electroconvulsive therapy as a medical treatment. Electroconvulsive therapy (ECT), also called shock therapy, involves administering one or more brief bursts of a moderate electric current to induce a seizure in the brain.

First used with people in 1938, ECT is a relatively simple and quick medical procedure. As shown in figure 6.36, the patient lies on a padded bed and electrodes are placed on one or both of their temples, depending on whether the left, right or both hemispheres are to be shocked. The patient is then given a short-term anaesthetic and injected with a muscle relaxant to minimise the chance of self-injury during a seizure. A soft object is placed between the teeth to prevent swallowing of the tongue.

When unconscious, a burst of electricity, for 0.1–0.5 seconds, is administered to induce a seizure. The seizure lasts for about 30 to 40 seconds. On regaining consciousness, the patient often reports a headache and is usually confused and disoriented for up to a few hours. In most cases, the patient experiences a permanent memory loss for events immediately before and after the ECT. Some patients, however, experience substantial memory loss that can be permanent.

The use of ECT for severe depression is rarely a once-only treatment. A patient is often required to undergo a series of six to ten ECT treatments over a period of several weeks.

About 80% of patients with severe depression usually show at least a temporary improvement after about four ECT treatments. After a few more treatments, improvement is longer lasting. Overall, however, there tends to be a high relapse rate, regardless of the number of treatments. About half the patients treated for severe depression experience a relapse within six months, unless they are also treated with antidepressants.

The major advantage of ECT is that it relieves the symptoms of depression relatively quickly, typically within days, whereas antidepressant medication can take weeks to provide relief. Because of its rapid therapeutic effects, ECT can be a lifesaving procedure for a severely depressed individual who is suicidal. In this case, waiting several weeks for relief can actually be deadly. ECT may also be an effective ‘last resort’ treatment for individuals who would otherwise continue to be debilitated by the symptoms of depression; for example, for people who are not helped by antidepressant medications or psychotherapy or cannot tolerate the side effects of antidepressants.

**FIGURE 6.31** Support groups for major depression provide an opportunity to share experiences and ways of dealing with issues.

**FIGURE 6.32** During ECT, electrodes on the forehead apply an electric current to the brain, creating a brief cortical seizure. Although ECT is controversial, for some severely depressed people it can be effective in alleviating their symptoms.
Although ECT can be effective in treating depression, how this occurs remains unknown. ECT’s biggest drawback is that its antidepressive effects can be short-lived. About half the patients experience a relapse within six months. Today, patients are often prescribed long-term antidepressant medication following ECT, which reduces the relapse rate. In cases of severe, recurrent depression, ECT may also be periodically readministered to prevent the return of depressive symptoms.

In the last decade there has been research on other brain stimulation techniques for treating severe cases of depression; for example, using deep brain stimulation (DBS) and transcranial magnetic stimulation (TMS) technologies.

### LEARNING ACTIVITY 6.15

#### Review questions

1. Complete the following table to summarise factors contributing to a mood disorder, such as major depression.

<table>
<thead>
<tr>
<th>Contributing factor</th>
<th>Description</th>
<th>How it influences</th>
</tr>
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<tbody>
<tr>
<td>Biological</td>
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<td>Genes</td>
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<td>Brain chemistry</td>
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<td>Psychological</td>
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<td>Stress response</td>
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<tr>
<td>Dysfunctional thinking</td>
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<td>Social</td>
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<tr>
<td>Poverty</td>
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<tr>
<td>Social stress</td>
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</tbody>
</table>

2. (a) Why do researchers use twin studies to investigate the possible role of genes in major depression?
   (b) How do the results of twin studies also provide evidence for environmental factors influencing the development of depression?
   (c) Does the existence of a genetic component automatically mean that a person will develop depression if a biological parent or relative has or has had the disorder? Explain your answer.

3. (a) Give two examples of social or cultural groups in Australian society you believe may be vulnerable to social isolation and therefore depression. Give a reason for each answer.
   (b) Describe the circumstances under which someone with lots of pets would be considered socially isolated.

4. (a) Suggest a suitable aim of cognitive behavioural therapy (CBT) in the treatment of a client with major depression.
   (b) What key assumption would underlie this aim?

5. Find an example of a reputable provider of online support services for depression or another mood disorder.
   (a) Name the organisation
   (b) What is the URL (weblink)?
   (c) Can support be accessed from the service ‘offline’? If so, explain now.
   (d) Give three examples of services offered at the site and now these are accessed.

### LEARNING ACTIVITY 6.16

#### Analysis of cross-cultural data on beliefs about depression

Consider the data in table 6.4 on page 35 and answer the following questions.

1. Which of the two depression scenarios is likely to be perceived by participants as the most severe case?
2. To what extent do differing perceptions appear to have influenced participant responses? Explain with reference to the data.
3. What cultural differences were there, if any, in relation to question 2? Explain with reference to the data.

4. Classify the causal factors into psychological, biological and social domains.
5. What cultural differences in beliefs about contributory factors do the data suggest? Explain with reference to the data.
6. Which of the causal factor(s) do you believe are inaccurate? Explain your answer(s).
7. On the basis of the data, write a conclusion about similarities and differences of Japanese and Australian opinions about causes of major depression (with or without suicidal thoughts).
PERSONALITY DISORDERS

Of all the factors that make us different from one another, personality is, for many people, the most intriguing. We frequently comment on the personality of others with statements such as, ‘She has a great personality’, or ‘All my friends think Sam is great, but they don’t know what he’s really like’. Or we describe someone as being ‘selfish’, ‘friendly’ or ‘shy’. You may have even heard someone talk about another person as having ‘no personality’. But everyone has a personality and it cannot be defined or described simply in one or two words.

Personality is a complex combination of characteristics. Psychologists have defined it in many ways over time. Most current definitions refer to personality as an individual’s unique pattern of thoughts, feelings and behaviour that are relatively stable over time and across situations. This means that personality is viewed as your unique and typical way of thinking, feeling and behaving in a wide range of situations. Furthermore, the definition incorporates your individual attitudes, values, morals, motivations, wishes, loves, fears and so on which make up ‘you’ — not only right now, but when you were younger and when you are older.

Some people have personality characteristics that are so inflexible and maladaptive that they cause problems in many areas of their lives. In addition, these characteristics may cause distress to the self and others. This is what usually happens with personality disorders.

**Personality disorders** are a group of mental disorders involving inflexible and maladaptive personality characteristics that interfere with functioning or cause significant personal distress. People with a personality disorder think, feel and/or behave in ways that differ markedly from what is acceptable in their culture. This has occurred for a very long time, usually for years. In addition to personal and social difficulties, they also tend to form inaccurate perceptions of themselves and others and to unrealistically interpret many social situations. In some cases, the person with a personality disorder may not see it as a disorder at all, but just ‘who they are’.

Most personality disorders have their origins in childhood or adolescence and persist into adulthood. Despite their specific problems, people with a personality disorder often function well enough to get by without professional assistance. But this does not mean that they actually have good mental health.

**Types of personality disorders**

There are three sub-categories of personality disorders in the DSM-5 — disorders characterised by dramatic or erratic behaviour and disregard for others (e.g. antisocial and narcissistic disorders), disorders characterised by anxious and fearful behaviours (e.g. obsessive-compulsive and dependent disorders), and disorders characterised by odd behaviours (e.g. schizoid and paranoid disorders).

All of these disorders involve a pervasive pattern of characteristics. This means the thoughts, feelings and behaviours associated with each disorder are evident in almost all aspects of a person’s life. Examples of personality disorders from each sub-category are:

**Antisocial personality disorder**: Disregard for and violation of the rights of others. Shows disrespect for the law and no concern about disobeying laws (e.g. repeatedly does things for which they can be arrested). Is consistently irresponsible (e.g. often skips work and debts) and likely to show a lack of empathy or guilt for wrongdoing. Will often blame their victims (e.g. ‘they deserved it for being stupid’, ‘he had it coming anyway’). Likely to act impulsively and is willing to be very aggressive with others. May be deceitful and manipulative (e.g. repeated lying, use of aliases, conning others) and show a reckless disregard for themself and others (e.g. no concern about drinking excessively and speeding). Many have shallow emotions and their relationships with others are superficial and involve little commitment or loyalty (e.g. comfortable using and abusing others). Some people with antisocial personality disorder are referred to outside psychology as a sociopath or psychopath, especially when they commit callous crimes.
Narcissistic personality disorder: Characterised by an exaggerated sense of self-importance, an overwhelming need for admiration by others but with a lack of empathy for others. Require a lot of attention, are extremely sensitive to criticism and may get angry at or reject anyone who criticises or doesn't admire them. Many believe they are 'special' and also have a sense of entitlement (e.g. expecting others to do special favours for them and to automatically accept whatever they say or do). Many are preoccupied with fantasies about power or success and constantly overestimate their personal qualities and achievements regardless of their actual performance. In conversations, they will almost always talk about themselves and show a lack of interest in whoever they are with. Their interpersonal relationships are disturbed by their self-interest, lack of empathy, ‘high maintenance’, arrogant behaviour or attitudes, and their habit of manipulating or taking advantage of others.

FIGURE 6.34 Narcissistic personality disorder draws its name from the Greek mythological figure Narcissus, who fell in love with his own reflection.

Borderline personality disorder: Characterised by ongoing impulsivity and intense fluctuations in mood, self-image and relationships with others. Usually experience extreme difficulties in their relationships. May be quite friendly one day and hostile the next, erupting in anger at the slightest sign of disapproval. May constantly seek reassurance and likely to be prone to feelings of depression, emptiness and fear of abandonment. Impulsivity can result in self-damaging behaviour such as binge drinking, spending sprees, reckless driving or sexual promiscuity. A significant number with the disorder have a history of broken friendships, divorce and lost jobs. Among the most commonly diagnosed personality disorders.

Histrionic personality disorder: Continual attention-seeking behaviour and exaggerated expression of emotions. People from different cultures vary in the extent to which they show their emotions, but someone with this disorder goes well beyond cultural standards.

Dependent personality disorder: Excessive psychological need to be cared for by other people. Very reliant on others and unwilling to take responsibility for themselves.

Obsessive-compulsive personality disorder: Preoccupation with orderliness, perfectionism and control. Not the same as and quite different from obsessive-compulsive disorder in which there are specific recurring thoughts or behaviours.

Paranoid personality disorder: Distrust and suspiciousness of others, resulting in their motives being interpreted as wanting to harm, deceive or exploit, even when there is no evidence to support this.

Contributing factors

The signs of a personality disorder usually appear during adolescence. In some cases, someone with a personality disorder may have had a similar disorder in childhood or some of the symptoms may have shown up at that time. However, according to the DSM, a person cannot be diagnosed with any personality disorder before age 18.

There are many different types of personality disorders and none can be attributed to a single cause. Nor has any specific factor been identified as having the most significant influence. A considerable amount of research has focused on antisocial personality disorder as people with this disorder are the most likely to cause harm and suffering to others. As with other mental disorders, many factors have been studied to understand how this type of disorder develops. From a biopsychosocial perspective, these factors include biological factors (such as genetic influence and nervous system functioning), psychological factors (such as fearlessness) and social factors (such as family environment).

In this section, we focus on antisocial personality disorder and consider biological, psychological and social factors that influence its development and treatment.
Biological — genetic influence and nervous system functioning

Twin and adoption studies suggest a possible genetic influence on antisocial personality disorder. For example, identical twins tend to be more likely to both have antisocial tendencies and engage in illegal behaviour when compared with fraternal twins. Specific personal characteristics associated with the disorder tend to show an even stronger relationship. For example, aggressive forms of antisocial behaviour are higher among identical twins than fraternal twins when compared to antisocial behaviour that involves only rule breaking.

Adoption studies show that adopted children whose biological parents engaged in antisocial behaviours have a higher rate of antisocial characteristics than that found among adopted children whose biological parents did not engage in such behaviour. Despite such findings, it can still be difficult to disentangle environmental influence such as the impact of family upbringing and role modelling by a parent who may have the disorder (Huffman, 2013).

It has also been proposed that people with antisocial personality disorder may have lower levels of autonomic nervous system reactivity and are therefore constantly under-aroused and less likely to experience anxiety. Their low autonomic reactivity requires them to need more stimulation to reach their ideal level of arousal when compared to people without the disorder. Furthermore, their lower level of arousal may lead them to thrill-seeking or sensation-seeking behaviour, such as irresponsible or illegal activities, in order to trigger a reaction and reach or maintain their ideal level of arousal. Their impulsivity will prevent them from weighing up the potential consequences before they engage in such behaviours.

Psychological — fearlessness and social learning

Some people with antisocial personality disorder continue to break the law despite their experiences with jail sentences. They have difficulty controlling their impulses and do not seem to experience the guilt or other feelings that stop most others from committing offences, lying or harming others. This has led psychologists to propose that people with antisocial personality disorder may not learn to avoid certain behaviours because they are unresponsive to punishment for their antisocial behaviour. As a consequence, they develop fearlessness or at least have a higher fear threshold. Things most people find frightening have little effect, if any, on people with antisocial personality disorder (Lykken, 1982).

Researchers who have tested the fearlessness hypothesis have found that people with antisocial personality disorder are slow at anticipating punishment, slow at learning how to stop responding when punishment becomes inevitable, and are more likely to be unresponsive to fear and threats when they are chasing monetary rewards. In addition, men with severe antisocial personality disorder tend to have a limited range or depth of feelings (called ‘emotional poverty’). For example, one study found that men with a severe antisocial personality disorder scored very poorly in recognising fear in other people when asked to name the emotions shown on faces in photos. However, they recognised other emotions quite well (Getzfeld, 2006; Kring & Johnson, 2012).

Social — family environment

Antisocial behaviour violates social norms — acceptable standards of behaviour. Since the family is a very influential source of learning social norms, researchers have investigated the possible contribution of the family environment to the development of antisocial learning processes and antisocial personality disorder.

Generally, these studies have found that people with antisocial personality disorder often come from homes characterised by inadequate supervision, neglect, harsh and inconsistent disciplinary practices, emotional deprivation, and antisocial tendencies or behaviour by one or both parents. Antisocial personality disorder is also more likely to develop when an individual is raised in a family environment where parents consistently use verbal, physical or emotional abuse and where there is inappropriate role modelling by parents, particularly the father. Growing up in a single parent home is in itself not related to antisocial personality disorder (Cohen, Brown & Smailes, 2001; Huffman, 2013; Miller & Lisak, 1999).

Social learning processes also contribute to the development of antisocial personality disorder. For example, research evidence shows that children can learn then copy the attitudes and behaviours of a parent who has antisocial tendencies. One study compared a group of 90 adults who had a record of antisocial behaviour with a group of 100 adults who lived and grew up in the same area but had no record of antisocial behaviour. The researchers found that among these participants, having a father (but not a mother) who was antisocial was related to antisocial behaviour as an adult. It was concluded that the presence of an antisocial father may serve as a role model for such behaviour (Sue, Sue & Sue, 2006).
Treatment

The most effective treatment for a personality disorder usually involves a combination of psychological therapy, social support and possibly medication. As with other mental disorders, treatment will depend on the type of disorder, its symptoms, their severity and how they interfere with functioning in various areas of life. For example, treatment for paranoid personality disorder may require use of antipsychotic medications, whereas treatment for dependent personality disorder may not.

Research has found that many people with a personality disorder have another, co-morbid (‘co-occurring’) mental disorder (as well as their personality disorder). For example, in one study, 113 participants with antisocial personality disorder who were in jail for a criminal offence were nearly all found to have a substance-related addictive disorder (Black, et al., 2010). Similarly, mental health professionals find that many people with a personality disorder initially consult them on a condition other than their personality disorder. For example, a person with antisocial personality disorder may seek treatment for a gambling addiction, or someone with borderline personality disorder might seek treatment for a mood disorder. Therefore, effective treatment for a personality disorder also involves treatment of a co-morbid mental disorder.

Treatment of a personality disorder is also challenging because of the very nature of the disorder. This type of disorder has been present for many years before the person seeks treatment and its symptoms are often so ingrained that it is difficult to bring about change thoroughly or quickly. The need for a longer-term treatment plan means that the dropout rate from treatment programs tends to be higher than for other disorders. In particular, people with antisocial personality disorder are unlikely to see their behaviours as problematic and are therefore poorly motivated to change themselves. Nonetheless, treatment can and does help people manage, reduce or even eliminate symptoms of their personality disorder.

Treatment for most personality disorders usually has a course of psychological therapy at its core. Psychodynamic therapy can help the person understand that their thoughts, feelings and behaviour are related to negative early childhood experiences. The therapy explores these experiences, how they influence functioning and how they can be overcome through changes in thinking and behaviour. Cognitive behavioural therapy can help the person recognise and change their irrational thoughts about themselves, other people and the world around them. Similarly, the ‘behavioural’ component of the therapy will target behaviour change.

There is no medication specifically designed for the treatment of any personality disorder. However, medication may be prescribed to treat a co-morbid disorder and associated problems that may be disrupting everyday functioning, such as depression, anxiety or psychotic symptoms. Medications can, for example, help reduce symptoms such as irritability, mood swings and impulsive behaviour.

Social support also has an important role in the treatment of personality disorders. Often, the very nature of an individual’s disorder has caused them to alienate friends, relatives and work colleagues. In many cases, family and friends of people with a personality disorder feel confused and angry. Consequently, people with a personality disorder have very limited social networks. This makes access to support groups in the community even more important.

Support groups run by and for people who interact on the basis of having the same type of personality disorder can provide mutual support to one another; for example, by devising strategies for problems they share and coping strategies for specific challenges in everyday life. Support programs may include help with finding suitable work, accommodation, training and education so that they can lead full and productive lives.
LEARNING ACTIVITY 6.17

Review questions

1. Explain the meaning of personality disorder with reference to two examples of different disorders.
2. List three characteristics that all personality disorders have in common.
3. Suggest a reason to explain why the DSM proposes that a personality disorder cannot be diagnosed in someone before they are aged 18.

4. (a) Explain why convenience sampling is more likely to be used in studies of antisocial personality disorder.
   (b) What is a limitation of studies that rely on convenience samples?

5. Make a copy of the following table and complete it in relation to antisocial personality disorder.

<table>
<thead>
<tr>
<th>Contributing factor</th>
<th>Description</th>
<th>How it influences</th>
</tr>
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<tbody>
<tr>
<td>Biological</td>
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<td>Genes</td>
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<tr>
<td>Nervous system function</td>
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<td>Fearlessness</td>
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<td>Social</td>
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<tr>
<td>Family environment</td>
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6. (a) Give two reasons to explain why treatment of personality disorders can be ‘challenging’.
   (b) What is a key difference between psychodynamic therapy and cognitive behaviour therapy?
   (c) How might medication be used to treat a personality disorder?
   (d) Explain the role of social support in the treatment of a personality disorder.

PSYCHOTIC DISORDERS

The term psychotic disorder is used to describe a group of disorders characterised by psychosis. Psychosis is a condition in which an individual experiences loss of contact with reality. Typically, the individual's thinking will be disorganised and they will have difficulty in distinguishing between what is real and self-generated perceptions. This means that the person has difficulty making sense of their thoughts, feelings or what is actually happening around them. The best known psychotic disorder is schizophrenia. All the other psychotic disorders have one or more symptoms like those of schizophrenia.

The term psychotic is used to describe someone who is experiencing many symptoms of a psychotic disorder. If someone is described by a mental health professional as experiencing psychosis or having a psychotic disorder, it means they are experiencing psychotic symptoms, but not that they are ‘violent’, ‘dangerous’, ‘psychopaths’ or ‘serial killers’, as some people believe. People with a psychotic disorder are not inherently violent or dangerous. When in a treatment or management program, they act like other people in the general population (Royal Australian and New Zealand College of Psychiatrists, 2009).

In most cases, psychotic disorders may develop gradually over an extended period. Some people experience an isolated episode of psychosis which lasts only a few days or weeks, others a few episodes of psychosis only, whereas others experience psychosis as part of an ongoing diagnosed disorder such as schizophrenia, bipolar disorder or a personality disorder.

FIGURE 6.36 A person with psychosis experiences loss of contact with reality. Their thinking is disorganised and they have difficulty making sense of their thoughts, feelings or what is actually happening around them.

eGuide plus

- TED talk on the experience of schizophrenia 14 m 45 s
- Tom’s story on living with schizophrenia 19 m 23 s
Key symptoms

The DSM-5 defines psychotic disorders in terms of key symptoms. These symptoms are generally described as either positive or negative.

Positive symptoms are experiences and behaviours that have been added to the person's normal way of functioning. These include hallucinations, delusions and disorganised thinking, speech and behaviour.

Negative symptoms take away something from a person's normal way of functioning. They include loss of interest or pleasure in normal activities, loss of motivation and a decrease in the intensity of emotional expression.

In order to be diagnosed as having a psychotic disorder, a person must experience at least one of the following five symptoms: delusions, hallucinations, disorganised thinking and speech, grossly disorganised or abnormal motor behaviour, negative symptoms. In addition, symptoms must have been experienced for variable amounts of time, depending on the specific disorder and they must also have a significant impact on the person's ability to study, work and undertake other daily activities.

Delusions

A delusion is a fixed false belief that is held with absolute certainty, even when there is strong factual evidence that does not support it. Delusions usually involve a misinterpretation of actual information or experience. The content of a delusion may be based on a variety of themes, such as the following.

- **Persecution**: a belief that one is going to be harmed, harassed, tormented, tricked, spied upon and so on. For example, a person might believe that scientists are trying to poison them with radioactive particles delivered through their tap water, or that a tracking device has been implanted in their brain, or that they are under constant surveillance because ASIO agents are trying to assassinate them. Persecution is the most common type of delusion.

- **Reference**: a belief that comments, actions, objects in the environment and so on are being directed at and have a special relevance ('reference') to oneself. For example, a person might believe that songs being played on the radio are about them or the newscaster on television is sending messages meant specifically for them.

- **Control**: a belief that thoughts, feelings or behaviour are being controlled by an external force. For example, a person might believe that aliens are controlling what they think and say.

- **Grandeur**: a belief that one has exceptional abilities, fame or importance. For example, a person might believe that they are Jesus Christ, that they have the power to cure cancer, that they dictated the Harry Potter stories to J.K. Rowling, or that they are going to be awarded an Order of Australia medal.

Hallucinations

A hallucination is a perceptual experience during which the individual sees, hears, feels, tastes or smells something that is not actually present in reality. Although hallucinations can occur in any of the senses, the most common are auditory hallucinations, which involve ‘hearing voices’.

Auditory hallucinations may be experienced as being ‘heard’ through the ears, in the brain or mind, from the body (e.g. the stomach), or anywhere in external space. Loudness may vary from a whisper through to shouting.

People experiencing auditory hallucinations usually appear preoccupied to someone else because they are paying attention to what the voices are saying. They may also be seen or heard talking to themselves because they are responding aloud to the voices inside their head. Having hallucinations can therefore make it difficult to focus attention on external activities or events, such as reading, watching television or having conversations with others.
**Disorganised speech (thinking)**

Disorganised speech reflects disorganised thinking. What is said is often not organised in a particularly meaningful way. Speech can be disconnected, jumbled and can sometimes seem as if it is ‘all over the place’. For example, the person may suddenly switch from one topic to another completely different topic (called derailment). In addition, answers to questions may be vaguely related or completely unrelated to what was asked (called tangentiality). In either case, the person is usually unaware of what they are doing and that others may be having difficulty following or understanding what is being said.

**Grossly disorganised or abnormal motor behaviour**

Behaviour often appears to be fragmented, inappropriate, unusual, unpredictable, purposeless and erratic. This severely affects their ability to perform the usual activities of daily living. For example, the individual may not be able to attend to their personal hygiene or prepare meals for themselves. They may also dress in an unusual manner. For example, they may wear many layers of clothing, such as several different dresses over each other, or wear a hat, coat and gloves on a very hot day.

A person with a psychotic disorder may also behave in socially inappropriate or unacceptable ways, such as talking loudly to themselves on a train, or display unpredictable agitation, such as shouting and swearing for no apparent reason.

*Catatonia* is used to refer to the marked decrease in responsiveness to external events that is associated with psychotic and other mental disorders. Catatonic behaviour ranges from resistance to instructions (catatonic negativism) to maintaining a rigid, inappropriate or bizarre posture to a complete lack of verbal responses (catatonic mutism) or motor responses (catatonic stupor). It can also include purposeless and excessive motor activity for which there is no apparent cause (catatonic excitement). For example, the person may appear agitated and wave and flap their arms around whilst quickly pacing back and forth.

**Negative symptoms**

Negative symptoms are particularly common in schizophrenia, often emerge gradually and may include affective flattening, avolition, alogia and anhedonia.

- **Affective flattening** is a reduction in the intensity of emotional expression, including the body language associated with emotions such as facial expressions, eye contact, arm movement and speech tones. For example, the person seems to stare, has a blank look on their face, speaks in a flat (‘monotonous’) voice, doesn’t maintain eye contact, and uses hardly any other expression when communicating.

- **Avolition** is a decrease in self-initiated, purposeful activities. It is similar to apathy, when a person experiences a lack of energy or enthusiasm for doing anything. It is apparent when the person has difficulty with or is unable to initiate or follow through on a course of action. For example, the person feels drained of energy and is no longer interested in going out and meeting friends or participating in activities about which they were once enthusiastic. Instead, they may sit or lie around at home for hours on end doing nothing.

- **Alogia** is sometimes called poverty of speech and involves a reduction in speech output, such as its content and fluency. The person may say very little and give very short, simple or empty replies to questions.

- **Anhedonia** is the decreased ability to experience pleasure from normally enjoyable activities. This may include recalling previously pleasurable experiences as not very enjoyable.
Types of psychotic disorders

The DSM-5 has a category called *Schizophrenia spectrum and other psychotic disorders*. All are characterised by the presence of one or more psychotic symptoms. However, the disorders vary in severity, depending on the type of symptoms, how many there are, how often they occur and how often they last. Psychotic symptoms can occur in an isolated episode or as part of an ongoing diagnosed disorder such as schizophrenia, bipolar disorder, depression or schizoaffective disorder.

- **Schizophrenia** — a brain disorder characterised by persistent symptoms of psychosis involving disturbances and disorganisation of thoughts, perceptions, feelings and behaviour. Many people with the disorder have an altered perception of reality, often a significant loss of contact with reality. They may see or hear things that don’t exist, hold beliefs that are odd or not true, speak in strange or confusing ways, believe that others are trying to harm them, feel like they’re being constantly watched and behave in disorganised ways. The collective influence of its symptoms severely impacts on the individual’s ability to function in everyday life.

  To be diagnosed with schizophrenia, an individual needs to have experienced symptoms for a significant amount of time during a one-month-period with some symptoms persisting for at least six months. At least one of these must be hallucinations, delusions or disorganised speech (thinking).

- **Delusional disorder** — troubled by one or more persistent delusions, such as persecution (e.g. being conspired against, cheated, spied on, poisoned, blocked from achieving goals), having made an important discovery, believing that a partner is unfaithful or that one is loved by another person, having a serious medical condition such as cancer.

- **Brief psychotic disorder** — experience one or more psychotic symptoms for at least one day and less than one month, then the symptoms disappear.

- **Schizoaffective disorder** — a mixture of symptoms of schizophrenia and mood disorders.

- **Substance/medication-induced psychotic disorder** — persistent delusions and/or hallucinations due to the direct physiological effects of excessive substance use or withdrawal from use; for example, drug abuse (including alcohol and medications), petrol sniffing, glue sniffing. In some individuals, these symptoms are temporary and disappear once the effect of the substance wears off. For others, however, the symptoms do not go away. The psychotic symptoms may persist and the drug use triggers the onset of a recurrent lifelong more serious psychotic disorder such as schizophrenia.

**LEARNING ACTIVITY 6.18**

**Review questions**

1. Explain the meaning of psychotic disorder with reference to schizophrenia and an example of another psychotic disorder.

2. Distinguish between positive and negative symptoms of psychosis with reference to examples of each type of symptom.

3. (a) What is a delusion?

   (b) Name and describe two types of delusions that a person with a psychotic disorder may experience.

4. Explain what a hallucination is with reference to an example.

5. Explain the difference between a delusion and a hallucination.

6. Describe the relationship between disorganised speech and disorganised thinking.

7. Explain the meaning of disorganised behaviour.
Contributing factors

What can explain the disconnected thoughts, bewildering hallucinations, odd delusions, lack of emotional expression and unusual behaviours associated with psychotic disorder? Most research has been conducted on schizophrenia as it includes symptoms of all other psychotic disorders, it is the most prevalent of this type of disorder and tends to be the most disabling.

In this section, we focus on schizophrenia and consider biological, psychological and social factors that influence its development. Schizophrenia is an extremely complex disorder. There is a great deal of variability among individuals with schizophrenia in the onset, type and duration of symptoms, as well as the length of the recovery phase. It should therefore not be surprising that many factors play a contributory role in varying degrees. These include biological factors (such as genetic influence and changes in brain structure and function), psychological factors (such as psychological responses to stress and cognitive impairments) and social factors (such as family environment).

As proposed by the biopsychosocial model, schizophrenia (or any other psychotic disorder) cannot be explained by a single factor or event. We consider examples of different influences, then an explanation of schizophrenia called the two-hit hypothesis. As suggested by the term, this proposes that schizophrenia can be explained by two events.

Biological — genetic influence and changes in brain structure and function

There is considerable research evidence that we can inherit a genetic predisposition to developing schizophrenia. Numerous studies of family histories of people with schizophrenia have found that the disorder tends to run in families, more so than other mental disorders.

As shown in figure 6.44, it is evident that the more closely individuals are biologically related to someone with schizophrenia, the greater the likelihood of developing the disorder. For example, identical twins have a risk of about 50%. This means that if one twin has schizophrenia, the other one will too in about 50 out of every 100 pairs of identical twins. In contrast, a non-twin brother or sister of a person with schizophrenia has about a 10% chance of also having schizophrenia (Gottesman, 1991; Joseph & Leo, 2006).

Although the risk for schizophrenia increases with genetic similarity, not even sharing 100% of genes means that the disorder will definitely develop. No single gene has been identified as being exclusively responsible for schizophrenia. A number of different genes are likely to contribute to its development. It seems that the genes we inherit can make us more vulnerable to the disorder, depending on other factors. Genes do their work in an environment so environmental factors influence their expression and activity.

Other research shows that schizophrenia is associated with changes in brain structure and function, to the extent that it is now commonly described as a brain disorder. For example, some studies have found that the brains of people with schizophrenia have a reduced level of activity...
in the prefrontal cortex and lower amounts of grey matter in both the frontal and temporal lobes — areas that are involved in speech, thinking, memory, emotions and behaviours which are disrupted in schizophrenia (Ingvar & Franz, 1974; Kring & Johnson, 2012).

Some people with schizophrenia have enlarged ventricles in the cerebral cortex, so this has been linked to the disorder. These are the fluid filled space in the brain, and their enlargement results from the death of nearby neurons. It is believed that the ventricles get bigger to take up the space left by the dead neurons. This suggests that schizophrenia may be accompanied by neural degeneration. Still other researchers have found a smaller hippocampus or amygdala. But how these abnormalities impact on the disorder remains unclear (Kempton et. al., 2010; Palha et. al., 2012).

Studies have also linked symptoms of schizophrenia to higher or lower than normal levels or activity of various neurotransmitters in specific brain areas. For example, overactivity of dopamine in the prefrontal cortex and basal ganglia has been linked to various positive and negative symptoms. Consequently, dopamine has been the target of some of the medications designed for the treatment of schizophrenia. But many patients treated with dopamine blocking or activating drugs do not improve so dopamine does not fully explain schizophrenia. Pinpointing the impact of specific neurotransmitters on schizophrenia is as problematic as isolating the effects of individual genes. It is likely various neurotransmitters are collectively involved in influencing the disorder (Lodge & Grace, 2010; Seeman, 2011).

### LEARNING ACTIVITY 6.19

**Analysis of data on schizophrenia and biological relationship**

1. Explain the meaning of the term genetic predisposition in relation to schizophrenia.
2. What is the risk of a person developing schizophrenia if one of their biological parents has the disorder?
3. What is the risk of a person developing schizophrenia if both of their biological parents have the disorder?
4. In what way do studies of people with varying genetic similarity provide evidence of a genetic basis for schizophrenia? Explain with reference to data in figure 6.44.
5. Explain, with reference to figure 6.44, why the term causation should not be used with the term genetic predisposition.

### BOX 6.10

#### Brain activation during auditory hallucinations

Studies using imaging techniques show that the primary auditory cortex is activated during auditory hallucinations. Researchers at the Mental Health Research Institute of Victoria in Melbourne used PET brain-scanning technology to analyse the brain activity of three groups of people. Group 1 had eight males with schizophrenia who were actively experiencing auditory hallucinations. Group 2 had seven males with schizophrenia who had never experienced auditory hallucinations. Group 3 had eight male control group participants who did not have schizophrenia.

During the brain scanning, the researchers instructed group 1 to indicate the onset and duration of their auditory hallucinations by pressing a button with their right index finger. Groups 2 and 3 were randomly exposed to various auditory stimuli via headphones as well as periods of no sound. Sounds consisted of speech that simulated auditory hallucinations such as a group of people all talking at the same time or crowd noise in which many human voices could be heard talking about different topics but with no single voice dominating. Like group 1, groups 2 and 3 were instructed to indicate their perception of the auditory stimulus by pressing a button with their right index finger.

The results of the study revealed that all three groups of participants demonstrated significant and extensive activation of the primary auditory cortex in both hemispheres. For group 1, the activation was in response to their auditory hallucinations and, for groups 2 and 3, the activation was in response to the random bursts of human speech generated by the researchers. It was also found that the primary auditory cortex of group 1 participants was activated in the absence of external auditory stimuli.

**This study shows that the brain activity of people hearing ‘imaginary’ voices (as occurs when someone with schizophrenia has auditory hallucinations) is similar to the brain activity that occurs in any person’s brain when they hear ‘real’ voices talking to them. Essentially, the brains of people with schizophrenia respond to their auditory hallucinations the same way as a regular brain responds to hearing someone speak. According to the researchers, when a person with schizophrenia reports that they are ‘hearing voices’, they are simply reporting what their brain is telling them (Copolov et. al., 2003).**
Psychological responses to stress and cognitive impairments

Schizophrenia is not a stress disorder and stress in itself does not cause schizophrenia. There is considerable research evidence, however, that stress can trigger its onset in people who are more vulnerable to developing the disorder, or worsen the symptoms for those who already have it.

Although people with schizophrenia do not appear to experience more stress in daily life than people without it, they tend to be more reactive and psychologically affected under stress. With such a blurred line between the real and the imaginary, and taking account of disturbances in thinking, schizophrenia can make it stressful — sometimes even frightening — to meet the challenges of daily life, especially when one does not cope as well with stress as do people without the disorder.

Coping is particularly difficult when lacking social support, which is quite common among people with schizophrenia.

Cognitive impairments are a major part of schizophrenia. It is estimated that as many as 85% of people diagnosed with the disorder experience significant problems with cognition. Studies have found that these problems may be present before the onset of obvious psychotic symptoms (Brewer et al., 2006). Problems with reasoning and memory underlie a number of cognitive impairments.

For example, people with schizophrenia tend to jump to conclusions — they make hasty judgements or decisions on the basis of inadequate or ambiguous information, typically resulting in unjustifiable or incorrect conclusions. Delusional beliefs are based on unjustifiable conclusions. They tend to be reached very quickly on the basis of limited data-gathering and there is also a tendency to stick to the first explanation for an event that comes to mind (Broome et al., 2007; Garety, Hemshal & Wessely, 1991).

Studies also show that people with schizophrenia tend to perform poorly on a wide range of memory tasks, particularly short-term working memory which involves processing information for just about everything we consciously do on a daily basis. People with schizophrenia tend to retain less information in this memory system and also process information more slowly. In addition, they also tend to have specific impairments in episodic memory, which is involved in the storage and recall of personal experiences. For example, they may not be able to remember what they did yesterday and where they left their house keys earlier in the day. People with an episodic memory impairment may also lose the ability to associate themselves with personally significant past events or plan for the future on the basis of past experiences. These difficulties underlie disorganised behaviour and thinking (Aleman, et al., 1999; Danion et al., 2007; Harvey & Sharma, 2002).

Family environment

Most research on social factors has focused on how different family environments may contribute to the development or experience of schizophrenia. For example, researchers have investigated such factors as dysfunctional parenting, disturbed family communication styles, and parental styles that are constantly critical or induce guilt, as possible contributors to schizophrenia.

One of the best known studies on the potential effects of family environments was conducted by Finnish psychiatrist Pekka Tienari and his colleagues (2004). In this 40-year longitudinal study, the researchers tracked a sample of 145 adopted individuals whose biological mothers had schizophrenia (the ‘high genetic risk’ group). As part of their study, the researchers assessed the degree of psychological adjustment of the family in which each adopted individual was raised, including the mental health of the adoptive parents. The families were then classified as either ‘psychologically healthy’ or ‘psychologically dysfunctional’.

FIGURE 6.43 Studies have found that people with schizophrenia can have an impairment in episodic memory that makes it difficult for them to remember their own history. This, in turn, significantly impacts on their day-to-day functioning.
Tienari and his colleagues found that adopted children with a biological mother who had schizophrenia had a much higher rate of schizophrenia than did the control group. However, this was true only when the children were raised in a psychologically dysfunctional family environment. As shown in figure 6.44, when children with a genetic background of schizophrenia were raised in a psychologically healthy adoptive family environment, they were about as likely as the control group children to develop schizophrenia.

However, living in a psychologically healthy family environment did not make children with a genetic history of schizophrenia immune to the development of schizophrenia. Figure 6.44 also shows that 5.8% of the 'high genetic risk' children developed schizophrenia, even though their family environment was psychologically healthy.

The results of Tienari’s study demonstrate the complex interaction of genetic and environmental factors in schizophrenia. Clearly, children who were genetically at risk to develop schizophrenia benefited from being raised in a psychologically healthy family environment. This means that a healthy psychological environment might counteract an individual’s genetic predisposition and therefore vulnerability for schizophrenia. Conversely, a psychologically dysfunctional family environment can act as a catalyst for the onset of schizophrenia, especially for those individuals with a genetic predisposition for schizophrenia.

Other research on family environments has focused on a specific communication pattern called expressed emotion. Expressed emotion (EE) is a negative communication pattern that is observed among some relatives of individuals with schizophrenia.

A high-EE family environment tends to be stressful as it involves a lot of negative criticism of the person with schizophrenia, and expressions of disapproval and hostility. For example, high-EE relatives tend to believe that psychotic symptoms are under the personal control of the family member with schizophrenia and make such statements as ‘you are a lazy person’ or ‘you’ve caused the family a lot of trouble’. In contrast, the low-EE environment tends not to be stressful as it tends to be characterised by warmth, affection, positive comments and interactions.

Some psychologists argue that high-EE relatives promote the onset of schizophrenia because of their stress-producing behaviour. However, it is still unclear as to whether expressed emotion can actually trigger the onset of schizophrenia or whether the dysfunctional and bizarre behaviour of a family member with schizophrenia may in itself promote dysfunctional communication and interactions among family members (Kavanagh, 1992).
THE ‘TWO-HIT’ HYPOTHESIS AS AN EXPLANATION FOR THE DEVELOPMENT OF SCHIZOPHRENIA

Research evidence makes it clear that there is no single cause of schizophrenia. Although researchers target possible causes, there is widespread agreement that the development of schizophrenia (and other mental disorders) is best accounted for in terms of the biopsychosocial model. Possible risk factors are as varied as its symptoms and how they interact is at least as complex as the disorder.

Before the biopsychosocial model became prominent in the last decade or so, psychologists preferred to explain schizophrenia in terms of heredity and environment; that is, people with the disorder have a genetic predisposition that interacts with a variety of environmental factors to promote its development. There was little explanation of how heredity and environment interacted until the ‘two-hit’ hypothesis was proposed. It is a relatively simple model because it explains schizophrenia in terms of the smallest possible number of events required to trigger its onset — two.

The ‘two-hit’ hypothesis, sometimes called the ‘two-hit’ theory or model, proposes that two events — genetic vulnerability and environmental stress — cause the development of schizophrenia. Both events are necessary and must occur in that order.

The first event, or ‘hit’, involves having a genetically determined vulnerability, or ‘weakness’. This may be, but is not limited to, having a biological relative with the disorder. For example, it may also be an infection that develops while in the uterus or disruption to fetal brain development resulting in a brain abnormality of some kind. This initial event is biological in nature and interferes with the normal course of development in some way. It also sets the stage for impact of the second event.

The second ‘hit’ is a major stressful life event that is environmental in nature; for example, ongoing exposure to a dysfunctional family environment, loss of a loved one through break-up or death, experiencing abuse, being the victim of bullying, being involved in a traumatic incident or any other stress-producing event. A stressful life experience increases the likelihood of the disorder when the first hit has occurred.

In sum, according to the ‘two-hit’ hypothesis, the origin of schizophrenia (or any other mental disorder) is a genetically determined vulnerability. This does not in itself cause the disorder but it sets the stage for developing the disorder. A second event involving a major life event or episode of stress which interacts with genetic vulnerability is necessary for development to occur. In addition, a stressful life event is unlikely to trigger the development of schizophrenia unless the individual has a genetic vulnerability for the disorder. But it is only when the first and second hits occur that the risk for schizophrenia increases. Nor does genetic vulnerability cease to exist if there is no second hit (Maynard, et al., 2001; Mednick, et al., 1998).

Treatment

Approximately 3% of the population will experience a psychotic disorder at some time in their life. In Australia, it is estimated that about five people in every thousand living in a large town or city are in contact with a mental health service each month because of psychotic symptoms.

Treatment can do much to help individuals manage their disorder and control symptoms. Studies show that the earlier a person is treated, the better their outcome is likely to be. Treatment generally includes a combination of psychological therapy, social support and medical treatment, depending on the type of disorder and its severity. All are usually essential for the best outcome in treating schizophrenia (SANE Australia, 2015).
Medication is currently the main treatment for schizophrenia. This can also be helpful for schizoaffective disorder. Called anti-psychotics, these help control symptoms by returning the chemical imbalance in their brain to a relatively normal level. For example, medications can relieve symptoms such as disorganised thinking, delusions and hallucinations. However, current medications don’t offer a total solution, or ‘cure’. Anti-psychotics tend to have side effects such as nausea, muscular spasms, agitation, weight gain and involuntary movements of the head and tongue that can affect speech. Sometimes, additional medication is prescribed to manage the side effects of the anti-psychotic medication.

Psychological therapy is commonly used to complement medications. For example, cognitive behaviour therapy can assist the individual to identify and change irrational or undesirable thoughts and ways of thinking that maintain many symptoms. The therapist may also teach specific strategies that target impaired reasoning and memory to assist the individual to cope more effectively in everyday life.

As with other mental disorders, social support is also very important, both within the family and the community. Support groups run by and for people who interact on the basis of having the same type of psychotic disorder can provide mutual support to one another; for example, by devising strategies for problems they share and coping strategies for specific challenges in everyday life. Support programs may include help with finding suitable work, accommodation, training and education so that they can lead full and productive lives. Understanding and acceptance by the community is also very important, particularly sensitivity to social stigma which is common among people with a psychotic disorder.

FIGURE 6.47 (a) Many years ago, people who developed schizophrenia were hospitalised and often restrained. The current emphasis in the treatment of people with schizophrenia is to avoid long-term institutional care and provide support in the community to enable them to live as ‘normal’ a life as possible. Hospitalisation is sometimes still used, primarily to stabilise symptoms with the view to the person returning home as quickly as possible. (b) Antipsychotic medication is currently the main treatment for schizophrenia.
BOX 6.11

Schizophrenia in the movies

Many movies featuring someone with schizophrenia have been made, some of which present more accurate portrayals of the disorder than others. While films such as those listed below raise the awareness of schizophrenia in society, they need to be considered alongside reputable sources of information about the disorder.

- The Soloist (2009)
- 15 Park Avenue (2005)
- Spider (2002)
- A Beautiful Mind (2001)
- Donnie Darko (2001)
- Spinning Out (1991)
- Blade Runner (1982)
- Lost Highway (1977)

FIGURE 6.48 Russell Crowe in the film A Beautiful Mind, in which he plays John Nash, a brilliant mathematician who suffers from schizophrenia

LEARNING ACTIVITY 6.20

Review questions

1. Complete the following table in relation to schizophrenia.

<table>
<thead>
<tr>
<th>Contributing factor</th>
<th>Description</th>
<th>How it influences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brain structure and functioning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stress response</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive impairments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family environment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Examine the PET scans in figure 6.41. Is the prefrontal cortex shown at the top or bottom on each scan? Explain your answer.

3. Give an example of how ‘the dysfunctional and bizarre behaviour of a family member with schizophrenia’ may in itself promote a high-EE family environment.

4. (a) Suggest a relevant aim for the study conducted by Tienari and colleagues (2004).
   (b) Suggest a label for the y axis in figure 6.44.
   (c) Briefly state the main results.
   (d) What do the results suggest about genes and family environment as contributory factors to schizophrenia?
   (e) What potential implications do the results of this study have with regard to preventive measures that could be taken by parents to reduce the likelihood that their child will develop schizophrenia? Explain your answer.

5. (a) How does the ‘two-hit’ hypothesis explain the development of schizophrenia?
   (b) To what extent does the ‘two-hit’ approach to explaining schizophrenia differ to the biopsychosocial approach?
   (c) Use the ‘two-hit’ hypothesis to explain the development of another type of mental disorder described elsewhere in this chapter.

LEARNING ACTIVITY 6.21

Reflection

It is a widespread myth that schizophrenia involves a ‘split’ personality or multiple personalities. This may be linked to schizophrenia literally meaning ‘split mind’, which refers to the positive symptoms which indicate an apparent split from or loss of contact with reality. The disorder involving multiple personalities is called dissociative identity disorder. Comment on whether or not it really matters that the technically correct terms (or labels) are used when referring to mental disorders.
LEARNING ACTIVITY 6.22

Media analysis — movies about schizophrenia

Box 6.11 lists several movies about schizophrenia. Watch one of these movies, or another in which schizophrenia is featured, and record your observations of how schizophrenia is portrayed. An observation checklist based on the one opposite should be used. You can modify this checklist by accessing it through your eBook. As you record your observations, include specific examples of behaviours in each category.

After watching the movie:

1. develop a profile of one (or more) of the characters depicted with schizophrenia, based on the data in your observation checklist
2. comment on how accurately schizophrenia is portrayed in the movie, with reference to the information in the text
3. describe any treatment used to manage schizophrenia in the movie
4. state whether the treatment used in the movie accurately reflects the way(s) in which schizophrenia is treated by the mental health profession.

<table>
<thead>
<tr>
<th>Observation checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour</td>
</tr>
<tr>
<td><strong>Positive symptoms:</strong></td>
</tr>
<tr>
<td>Hallucinations</td>
</tr>
<tr>
<td>Delusions</td>
</tr>
<tr>
<td>Disorganised speech (thinking)</td>
</tr>
<tr>
<td>Disorganised behaviour</td>
</tr>
<tr>
<td><strong>Negative symptoms:</strong></td>
</tr>
<tr>
<td>Low interest/pleasure</td>
</tr>
<tr>
<td>Low energy/motivation</td>
</tr>
<tr>
<td>Flat emotional expression</td>
</tr>
<tr>
<td><strong>Everyday life coping</strong></td>
</tr>
</tbody>
</table>

LEARNING ACTIVITY 6.23

Media response

Conduct a search of the Australian media or the internet and select an item on schizophrenia that you believe is inaccurate and/or irresponsible and may therefore contribute to social stigma.

Write a report that includes answers to the following, using one or more examples from your chosen media item:

- Name of item and source details
- A description of how schizophrenia is represented, with reference to examples
- Other comments that you believe are relevant
- An explanation of how this item may contribute to the development or maintenance of social stigma, with references to information in this text.

Ensure you include a copy of the item or source where appropriate (e.g. a weblink).

LEARNING ACTIVITY 6.24

Mental disorder brochure

Select one of the mental disorders described in the text.

Develop a fact sheet in the form of a brochure that could be displayed in a doctor’s surgery or community agency. The brochure should include the following information:

- name of the disorder
- different types of the disorder (if relevant)
- brief description of the disorder(s)
- typical symptoms
- who it can affect (e.g. age, sex)
- types of treatment
- offline and online support
- explain what schizophrenia is with reference to key symptoms
- outline a range of relevant biological, psychological and social factors
- indicate how these factors may contribute to the development and management of schizophrenia, including possible relationships between different factors.

Written information may be in a dot-point format, but ensure that all relevant information is accurately and adequately explained, using appropriate examples to clarify your understanding of key concepts.
CHAPTER SUMMARY

Approaches to describing normality
- Conceptualisation of normality
- Mental health and mental disorder
- Mental health as a product of internal and external factors

Categories of mental disorders
- Labelling someone with a mental disorder
- Addiction disorders
- Anxiety disorders
- Mood disorders
- Personality disorders
- Psychotic disorders

Atypical psychological development
- Typical and atypical behaviours
- Adaptive and maladaptive behaviours
- Rosenhan’s (1973) research on labelling
- Gambling
  - Gambling as an addiction
  - Problem gambling
  - Gambling disorder
  - Contributing factors
  - Treatment
  - Types of anxiety disorders
  - Contributing factors
  - Treatment
  - Types of mood disorders
  - Contributing factors
  - Treatment
  - Types of personality disorders
  - Contributing factors
  - Treatment
  - Key symptoms
  - Types of psychotic disorders
  - Contributing factors
  - Treatment

Contributing factors
- Social — social acceptability of gambling
- Biological — stress response and brain chemistry
- Psychological — distorted ways of thinking
- Social — poverty and social stress
- Biological — genes and brain chemistry
- Psychological — psychological responses to stress and dysfunctional ways of thinking
- Social — family environment
- Biological — genetic influence and cognitive impairments
- Psychological responses to stress and cognitive impairments

Treatment
- Dopamine reward system
- Psychological — distorted ways of thinking
- Social — social acceptability of gambling
- Biological — stress response and brain chemistry
- Psychological — learning processes and faulty thinking
- Social — transmission of threat information and parental modelling
- Biological — genes and brain chemistry
- Psychological — psychological responses to stress and dysfunctional ways of thinking
- Social — poverty and social stress
- Biological — genetic influence and nervous system functioning
- Psychological — fearlessness and social learning
- Social — family environment
- Delusions
- Hallucinations
- Disorganised speech (thinking)
- Grossly disorganised or abnormal motor behaviour
- Negative symptoms
- Biological — genetic influence and changes in brain structure and function
- Psychological responses to stress and cognitive impairments
- Family environment

The ‘two-hit’ hypothesis as an explanation for the development of schizophrenia
CHAPTER 6 TEST

SECTION A — Multiple-choice questions

Choose the response that is correct or that best answers the question. A correct answer scores 1, an incorrect answer scores 0. Marks will not be deducted for incorrect answers. No marks will be given if more than one answer is completed for any question.

Question 1
Which of the following is a psychological factor that could contribute to the development of a mental disorder?
A. Poverty
B. Being bullied by someone at school
C. How we perceive our internal and external environments
D. The inheritance of particular genes

Question 2
In relation to mental disorders, atypical behaviour means that an individual
A. is distressed and extremely upset.
B. behaves in a way that is different from how they usually do.
C. is unable to do the kinds of things they normally do on a daily basis.
D. behaves in a way that is consistent with how they usually do.

Question 3
A mental disorder is best described as
A. maladaptive behaviour.
B. a mild and temporary change in the way a person thinks, feels and behaves.
C. a mental condition that will usually resolve itself without treatment.
D. a diagnosable psychological condition that significantly disrupts how a person usually thinks, feels and behaves.

Question 4
Schizophrenia
A. can usually be cured by medication.
B. is a type of split personality.
C. is a psychotic disorder.
D. cannot be diagnosed before someone reaches 18 years of age.

Question 5
Which of the following is not a biological factor that could contribute to the development of a mental disorder?
A. Social stress
B. Genetic inheritance
C. Dopamine activity
D. Enlarged ventricles

Question 6
Cognitive behaviour therapy (CBT) primarily aims to
A. change the way a person feels or behaves by changing their thinking.
B. treat mental disorders using relaxation techniques.
C. change the way a person thinks by changing their feelings or behaviour.
D. treat mental disorders using social support.

Question 7
A disadvantage of labelling a person with a specific mental disorder is that
A. there are not enough labels to cover all the different mental disorders.
B. the label may be misunderstood by admission staff if the individual needs to be hospitalised.
C. a label can influence the thoughts, feelings or behaviour of the person with the disorder in unwanted ways.
D. the process of labelling is often inaccurate and usually unreliable.

Question 8
If a person develops a phobia by watching someone else’s fearful response to a particular object or situation, they are said to have developed their phobia through
A. classical conditioning.
B. operant conditioning.
C. observational learning.
D. transmission of threat information.

Question 9
Judging normality or abnormality on the basis of what most people do or do not do reflects the _____ approach.
A. historical
B. statistical
C. functional
D. situational
Question 10
Which of the following is the best example of a support group for someone with a gambling addiction?
A. Members of a ‘well-functioning’ family who interact with someone recovering from a gambling addiction
B. A group of people with a gambling addiction who meet to support each other
C. A group of people who meet and devise recovery strategies for someone with a gambling addiction
D. A group of mental health professionals who monitor the recovery of a client with a gambling addiction

Question 11
The biopsychosocial model explains the development of a personality disorder by emphasising
A. how biological factors influence psychological factors, which in turn influence social factors.
B. the relative contribution of biological, psychological and social factors.
C. the interaction of biological, psychological and social factors.
D. the impact of underlying biological factors on psychological and social factors.

Question 12
In relation to gambling addiction, tolerance refers to
A. decreased sensitivity to the thrill of gambling over time, whereby increased amounts of money or risk-taking are required to achieve the former effects.
B. needing to spend increasing amounts of money or take bigger risks to chase losses accumulated through gambling.
C. the process of increasingly permitting or supporting engagement in gambling.
D. the unpleasant reactions that occur when gambling is discontinued or suddenly reduced.

Question 13
Jack’s wife has told him she wants a divorce. ‘I don’t know how she can be so selfish,’ he thinks. ‘Sure, I spend a lot of time at the casino, but I am doing it for our family. She doesn’t understand that there are ups and downs in poker. So finances have been a little tight. I just need a little time to get the money back. I know how to work the table. I’ve got the skills needed to beat the system.’

What type of cognitive distortion is Jack exhibiting?
A. Overactivity of the dopamine reward system
B. The notion of being due for a win
C. Gambler’s fallacy
D. Illusion of control

Question 14
Mood is best described as
A. irritability. C. mania.
B. depression. D. an emotional state.

Question 15
In order to be diagnosed with major depression, it is essential that an individual experiences
A. a depressed mood for a period of at least two weeks.
B. one or more mood swings from ‘high’ (mania) to ‘low’ (sadness).
C. intense sadness.
D. one or more thoughts of death or suicide.

Question 16
All personality disorders are characterised by
A. distress.
B. inflexible behaviour.
C. adaptive behaviour.
D. erratic behaviour and disregard for others.

Question 17
A personality disorder will not be categorised in this way unless there is evidence of a/an ____ pattern of behaviour.
A. odd
B. pervasive
C. anxious and fearful
D. culturally acceptable

Question 18
An individual with a psychotic disorder strongly believes that they are a participant in a ‘top-secret’ experiment run by ‘the government’, despite the fact that there is strong evidence that does not support this belief. It is likely that this person is experiencing
A. a delusion.
B. an hallucination.
C. fearlessness.
D. a negative symptom.

Question 19
If someone has a genetic predisposition for schizophrenia, it is most likely that they
A. have the single gene responsible for schizophrenia.
B. do not have a close biological relative with schizophrenia.
C. have been adopted by someone with schizophrenia who may also be a biological relative.
D. have a close biological relative with schizophrenia.

Question 20
An individual with a psychotic disorder may hear voices that are not real. This is an example of
A. grandeur.
B. a delusion.
C. a hallucination.
D. disorganised thinking.
SECTION B — Short-answer questions

Answer all questions in the spaces provided.

**Question 1** (1 mark)
What is the full name of the reference commonly called DSM?

**Question 2** (4 marks)
Explain the difference between:
(a) mental health and disorder (2 marks)

(b) atypical and maladaptive behaviour (2 marks)

**Question 3** (2 marks)
How does the ‘two-hit’ hypothesis account for the development of schizophrenia?

**Question 4** (3 marks)
Give an example of a biopsychosocial approach to the treatment or management of a mental disorder. Ensure you name the disorder. (3 marks)
Question 5 (5 marks)
Explain what addiction is with reference to four characteristics.

Question 6 (3 marks)
Explain how an anxiety disorder could be distinguished from a mood disorder with reference to key characteristics or symptoms of each of these disorder categories.