

# CHAPTER I

# WHAT IS HEALTH?

### **Learning outcomes**

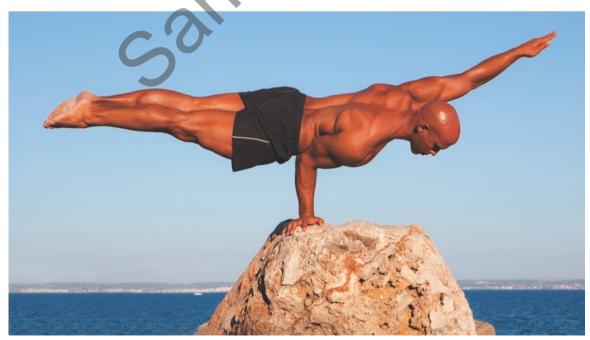
By the end of this chapter, you should be able to:

- LO 1.1 Explain key perspectives on health, illness and disability, including the biomedical and biopsychosocial models.
- LO 1.2 Describe the influence of life stage, culture and health status on health and illness concepts.
- LO 1.3 Identify a range of important influences on the domains of health.
- LO 1.4 Discuss the role of psychology, and specifically the discipline of health psychology, in understanding health, illness and disability.
- LO 1.5 Explain how health is more than simply the absence of physical disease or disability.

#### **HEALTH IS GLOBAL**

In August 2014 Rome was converged upon, not by tourists (although they were there too!), but by planeloads of scientists from industry and academic institutions, those working in health informatics, and possibly some health psychologists, to attend the

Third International Conference on Global Health Challenges. Of relevance here is that the Rome conference addressed how best to record and analyse global data relating to disease, death, lifestyle and population change, the 'big data' that helps guide



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public health policies for the future. At the conference, as in this chapter, it was essential to acknowledge inequities in these data within and between countries. The conference also addressed how health and mobile technologies can be best used to promote individual and population health through changes in clinical practice, increased health monitoring or behaviour change 'nudging', and how, globally, we can prepare for pandemics and an ageing population. The Seventh International Conference on Global Health Challenges held in 2018 in Athens had a continued focus on the importance of harnessing technologies to improve health. Specifically, topics included the use of informatics to improve health, the use of scalable electronic systems and technology in healthcare and other eHealth initiatives. The challenges associated with advances in technology, such as security and data quality assurance, were also prioritised, as were ways to harness these technologies to allow them to increase access to quality healthcare. In addition, the 2018 conference focused on patient-centred care and 'alternative' models of care, including preventative medicine, natural approaches to medicine and home surveillance.

According to the Department of Foreign Affairs and Trade (DFAT, 2017), Australia contributes to global health in numerous ways. This includes contributing to

the global fund to fight AIDS, tuberculosis and malaria and being part of Gavi, the Vaccine Alliance which aims to introduce new vaccination programs in developing countries. In recognition of the importance of global health to our own future, the Australian government continues to give a core voluntary contribution to the World Health Organization (\$12.36 million in 2016–2017) and the Joint United Nations program on HIV/AIDS (UNAIDS) (\$4.5 million in 2016–2017). In addition to these ongoing contributions, the government also pledged \$54 million towards the eradication of polio in 2015–2020.

Around the world, many of us attend conferences such as the Global Health event in Athens, Greece, in 2018. These conferences allow us to identify new developments, what is cutting edge, and what is the exciting science that can perhaps have an impact on future health in our own country and on a global scale. This textbook brings together evidence that can not only educate the aspiring health psychologist, but also help inform both policy and practice. Whether we achieve important policy and practice change will depend on what we as health psychologists 'do' with our evidence as described in the final chapter. Hopefully over the course of the 17 chapters in this book you will get a good sense of our successes, and the challenges ahead, nationally and internationally.

### **Chapter outline**

What do we mean by health, and do we all mean the same thing when we use the term? This chapter considers the different ways in which people have been found to define and think about health, illness and disability: first, by providing a historical overview of the health concept that introduces the debate over the influence of mind on body; and, second, by illustrating how health and illness belief systems vary according to factors such as age, culture and health status. We introduce the issue of developmental differences in health perceptions and examine whether children define and think about health differently to a middle-aged or elderly person. Against this backdrop of defining health and related belief systems, we introduce the reader to key models on which our discipline is founded—the biomedical and the biopsychosocial models of illness. To conclude the chapter we introduce the field of health psychology and, by outlining the field's key areas of interest, highlight the questions health psychology research can address.

# What is health? Changing perspectives

Models of health and illness

First, we need to be clear about what health is. Health is a word that most people will use without realising that it may hold different meanings for different people, at different times in history, in different cultures, in different social classes, or even within the same family, depending, for example, on age or gender. Stone (1979) pointed out that until we can agree on the meaning of health

and how it can be measured we are going to be unable to answer questions about how we can protect, enhance and restore health. The root word of health is 'wholeness', and indeed 'holy' and 'healthy' share the same root word in Anglo-Saxon, which is perhaps why so many cultures associate one with the other (e.g. Aboriginal medicine men in Australia are traditionally also spiritual leaders). The fact that health's linguistic roots are in 'wholeness' also suggests the early existence of a broad view of health that included both mental and physical aspects. This view has not held dominance throughout history. Some different, but not necessarily oppositional, views of health are described below.

#### Mind-body relationships

Archaeological finds of human skulls from the Stone Age have attributed the small neat holes found in some skulls to the process of 'trephination' (or trepanation), whereby a hole is made in order for evil spirits to leave the ailing body. Disease appeared to be attributed to evil spirits. However, by the time of ancient Greece, the association between mind and body was viewed somewhat differently. It is in the writings from ancient Greece (circa 500 BG) that we see differing explanations of health and disease to that seen in earlier times. Instead of attributing illness to evil spirits or gods, the ancient Greek physician Hippocrates (circa 460–377 BC) attributed it to the balance between four circulating bodily fluids (called humours): yellow bile, phlegm, blood and black bile. It was thought that when a person was healthy the four humours were in balance, and when they were ill-balanced due to external 'pathogens', illness occurred. The humours were attached to seasonal variations and to conditions of hot, cold, wet and dry, where phlegm was attached to winter (cold-wet), blood to spring (wet hot), black bile to autumn (cold-dry) and yellow bile to summer (hot-dry). Hippocrates considered the mind and body as one unit, and thus it was thought that the level of specific bodily humours related to particular personalities: excessive yellow bile was linked to a choleric or angry temperament; black bile was attached to sadness; excessive blood was associated with an optimistic or sanguine personality; and excessive phlegm with a calm or phlegmatic temperament. Healing involved attempts to rebalance the humours, for example, through bleeding or starvation, or special diets and medicines. Even this far back in time, eating healthily was considered helpful to the balance of the humours (Helman, 1978). This humoral **theory** of illness attributed disease states to bodily functions but also acknowledged that bodily factors impacted on the mind.

This view continued with Galen (circa and 129–199), another influential Greek physician in ancient Rome. Galen considered there to be a physical or pathological basis for all ill health (physical or mental) and believed not only that the four bodily humours underpinned the four dominant temperaments (the sanguine, the choleric, the phlegmatic and the melancholic) but also that these temperaments could contribute to the experience of specific illnesses. For example, he proposed that melancholic women were more likely to get breast cancer, offering not a psychological explanation but a physical one because melancholia was itself thought to be underpinned by high levels of black bile. This view was therefore that the mind and body were interrelated, but only in terms of physical and mental disturbances both having an underlying physical cause. The mind itself was not thought to play a role in illness **aetiology**. This view dominated thinking for many centuries to come but lost predominance in the eighteenth century when organic medicine, and in particular cellular pathology, developed and failed to support the humoral underpinnings. However, Galen's descriptions of personality types were still in use in the latter half of the twentieth century (Marks, Murray, Evans & Willig, 2000, pp. 76–77).

In the early Middle Ages (fifth–sixth century), however, Galen's theories had lost dominance when health became increasingly tied to faith and spirituality. At this time, illness was seen as God's punishment for misdeeds or, similar to very early views, the result of evil spirits entering one's soul. Individuals were thought to have little control over their health, whereas priests, in their perceived ability to restore health by driving out demons, did. The Church was at the forefront of society at this time and so science developed slowly. The mind and body were generally viewed as working together, or at least in parallel. However, the prohibition of scientific investigation, such as dissection, limited medical progress and advancements in understanding, and therefore mental and mystical explanations of illness predominated. Such causal explanations elicited treatment along the lines of self-punishment, abstinence from sin, prayer or hard work.

#### theory

A general belief or beliefs about some aspect of the world we live in or those in it, which may or may not be supported by evidence; for example, women are worse drivers than men.

**aetiology (etiology)**The cause of disease.

These religious views persisted until the early fourteenth and fifteenth centuries when a period of 'rebirth', the Renaissance, began. During the Renaissance, individual thinking became increasingly dominant and the religious perspective became only one among many. The scientific revolution of the early 1600s led to huge growth in scholarly and scientific study and developments in physical medicine. As a result, the understanding of the human body, and the explanations for illness, became increasingly organic and physiological, with little room for psychological explanations.

During the early seventeenth century, the French philosopher René Descartes (1596–1650), like the ancient Greeks, proposed that the mind and body were separate entities. However, Descartes also proposed that interaction between the two 'domains' was possible, although initially the understanding of how mind-body interactions could happen was limited. For example, how could a mental thought, with no physical properties, cause a bodily reaction (e.g. a neuron to fire) (Solmes & Turnbull, 2002)? This is defined as **dualism**, where the mind is considered to be 'non-material' (i.e. not objective or visible, such as thoughts and feelings) and the body is 'material' (i.e. made up of real mechanical 'stuff', physical matter such as our brain, heart and cells). Dualistic thinking considers the material and the non-material to be independent. Physicians acted as guardians of the body, which was viewed as a machine amenable to scientific investigation and explanation, whereas theologians acted as guardians of the mind—a place not amenable to scientific investigation. The suggested communication between mind and body was thought to be under the control of the pineal gland in the midbrain, but the process of this interaction was unclear. Because Descartes believed that the soul left humans at the time of death, dissection and autopsy study became acceptable to the Church, and so the eighteenth and nineteenth centuries witnessed a huge growth in medical understanding. Anatomical research, autopsy work and cellular pathology concluded that disease was located in human cells, not in ill-balanced humours

Dualists developed the notion of the body as a machine (a **mechanistic** viewpoint), understandable only in terms of its constituent parts (molecular, biological, biochemical, genetic), with illness understood through the study of cellular and physiological processes. Treatment during these centuries became more technical, diagnostic and focused on the physical evidence obtainable, with individuals perhaps more passively involved than previously (when at least they had been expected to pray or exorcise their demons in order to return to health). This approach underpins the **biomedical model** of illness.

#### Biomedical model of illness

In this model, health is defined as the absence of disease, and any symptom of illness is thought to have an underlying physical pathology that will hopefully, but not inevitably, be cured through medical intervention. Adhering rigidly to the biomedical model would lead to proponents dealing only with objective facts and assuming a direct causal relationship between illness or disability, its symptoms or underlying pathology (disease), and adjustment outcomes. The assumption is that removal of the pathology through medical intervention will lead to restored health (i.e. illness or disability results from disease either originating outside the body, 'germs', or through involuntary internal changes, such as cell mutations). This relatively mechanistic view of how our bodies and organs work, fail and can be treated allows little room for subjectivity. The biomedical view has been described as reductionist where the basic idea is that mind, matter (body) and human behaviour can all be reduced to, and explained at, the level of cells, neural activity or biochemical activity. Reductionism tends to ignore evidence that different people respond in different ways to the same underlying disease because of differences, for example, in personality, cognition, social support resources or cultural beliefs.

The history of Aboriginal and Torres Strait Islander people's medicine follows a different path to that of Western medicine. For a detailed discussion of this topic see Maher (1999) and Thomson (2003), who include references to other material. Maher notes diversity between Australian indigenous groups in the content and strength of their beliefs, but suggests that, overall, the traditional Aboriginal model of illness causation emphasises social and spiritual dysfunction as a cause of illness. This approach emphasises that individual wellbeing is always contingent upon the effective discharge of obligations to society and the land. People who do not discharge their obligations, or breach a taboo, are made ill, either through physical intervention (e.g. a car accident) or

#### dualism

The idea that the mind and body are separate entities (cf. Descartes).

#### mechanistic

A reductionist approach that reduces behaviour to the level of the organ or physical function. Associated with the biomedical model.

#### biomedical model

A view that diseases and symptoms have an underlying physiological explanation.

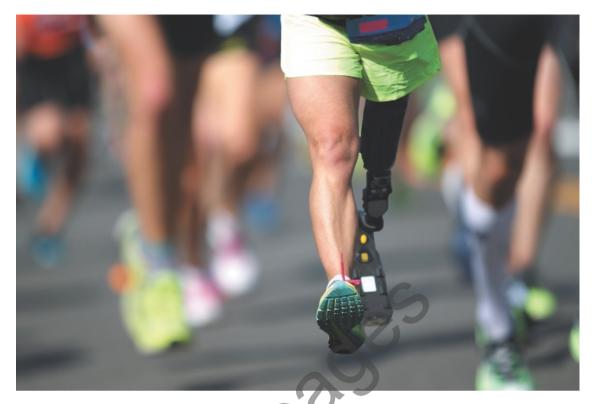


Photo 1.1 Having a disability does not equate with a lack of health and fitness

Source: flysnow/Fotolia.com

supernatural intervention (e.g. a serious illness). Thus Aboriginal and Torres Strait Islander culture has always emphasised the connection between the mind, spirit and body, which is more akin to a broader biopsychosocial approach.

### Biopsychosocial models of health and illness

In terms of mind-body associations, what is perhaps closer to the 'truth', as we understand it today, is that there is one type of 'stuff' (monist) but that it can be perceived in two different ways: objectively and subjectively. For example, many illnesses have organic underlying causes, but also elicit uniquely individual responses due to the action of the mind (i.e. subjective responses). So, while aspects of reductionism and dualistic thinking have been useful, for example, in furthering our understanding of the aetiology and course of many acute and infectious diseases (Larson, 1999), the role of the mind in the manifestation of, and response to, illness is crucial to furthering our understanding of the complex nature of health and illness. Consider, for example, the extensive evidence of 'phantom limb pain' experienced in amputees—how can pain exist in an absent limb? Or consider the widespread acknowledgement of the placebo effect—how can an inactive (dummy) substance lead to reported reductions in pain or other symptoms which are equivalent to reductions described by those receiving an active pharmaceutical substance or treatment? Subjectivity in terms of beliefs, expectations and emotions interact with bodily reactions to play an important role in the illness or stress experience.

This text aims to illustrate that psychological and social factors can add to biological or biomedical explanations and understanding of health and illness experiences. This is known as the biopsychosocial model, and was first proposed by George L. Engel in 1977. The biopsychosocial model is the basis of much of health psychology and is also employed in several allied health professions, such as occupational therapy and, to a growing extent, in the medical profession. The biopsychosocial model remains relevant today and has garnered more than 10000 citations on Google Scholar and its influence over healthcare and medical research has only continued to grow over the past 40 years (Fava & Sonino, 2017; Wade & Halligan, 2017).

### A view that diseases and symptoms can be explained by a combination

biopsychosocial

of physical, social, cultural and psychological factors (cf. Engel, 1977).

#### Challenging dualism: psychosocial models of health and illness

Evidence of changed thinking was illustrated in an editorial in the *British Medical Journal* (Bracken & Thomas, 2002) suggesting a need to 'move beyond the mind-body split'. The authors note that simply because neuroscience enables us to explore the 'mind' and its workings 'objectively' by the use of increasingly sophisticated scanning devices and measurements, this does not mean we are furthering our understanding of the subjective 'mind'—the thoughts, feelings and the like that make up our lives and give it meaning. They comment that 'conceptualising our mental life as some sort of enclosed world living inside our skull does not do justice to the reality of human experience' (p. 1434). The fact that this editorial succeeded in being published in a medical journal with a traditionally biomedical stance is evidence of a weakened Descartian 'legacy'.

As our understanding of the bi-directional relationship between mind and body has grown, dualistic thinking has lessened, and psychology has played a significant role in this altering perspective. A key role was played by Sigmund Freud in the 1920s and 1930s when he redefined the mind-body problem as one of 'consciousness' and postulated the existence of an 'unconscious mind' seen in a condition he named 'conversion hysteria'. Following examination of patients with physical symptomatology but no identifiable cause, and by using hypnosis and free association techniques, he identified unconscious conflicts which he believed had been repressed. These unconscious conflicts were considered to 'cause' the physical disturbances including paralysis and loss of sensation in some patients where no underlying physical explanation was identified (i.e. hysterical paralysis; e.g. Freud & Breuer, 1895).

Freud stimulated much work into unconscious conflict, personality and illness, which ultimately led to the development of the field of *psychosomatic medicine* (see later section). Psychologists have highlighted the need for medicine to become more holistic and to consider the role played in the aetiology, course and outcomes of illness by psychological and social factors. As described above, the biopsychosocial model signals a broadening of a disease or biomedical model of health to one encompassing and emphasising the interaction between biological processes and psychological and social influences (Engel, 1977, 1980). In doing so, it offers a complex and multivariate, but potentially more comprehensive, model with which to examine the human experience of illness. It burgeoned in popularity as a result of the many challenges to the biomedical approach as briefly illustrated above, but also due to increasing recognition of the role individual behaviour plays in health and illness. It is to this that we turn our attention briefly now.

### Behaviour and health

The dramatic increases in life expectancy witnessed in Western countries, including Australia, in the twentieth century (partially due to advances in medical technology and treatments) led to a general belief—in Western cultures at least—in the efficacy of traditional medicine and its power to eradicate disease. This was most notable following the introduction of antibiotics in the 1940s; although Fleming discovered penicillin in 1928, it was some years before it and other antibiotics were generally available. Such drug treatments, alongside increased control of infectious disease through vaccination and improved sanitation, are partial explanations of Australian life expectancy at birth increasing from 55 years in 1900 (Kinsella, 1992) to 80.3 for men and 85.2 for women in 2014 (AIHW, 2016), figures that place us seventh among OECD countries in terms of longevity. Unfortunately, the picture is not so rosy for indigenous Australians. While there are many deficiencies in data collection about Aboriginal and Torres Strait Islander people, including problems in defining and recording indigenous status, the best estimates are that both indigenous men and women live around 10 years less than same gender non-indigenous Australians. As such, an Aboriginal or Torres Strait Islander born in 2010-2012 is expected to live until 69 for men and 73.7 years for women (AIHW, 2016). These cultural variations can be explained to a large extent by differences in lifestyle and diet. In fact, much of the fall in mortality seen in the developed world preceded the major immunisation programs and therefore it is the wider social and environmental changes, such as developments in education and agriculture, which led to changes in diet, or the development of sewerage and waste disposal systems, which are mainly responsible for improved public health (see also Chapter 2).

One hundred years ago, the 10 leading causes of death worldwide were infectious diseases such as tuberculosis and pneumonia, with diseases such as diphtheria and tetanus highly common. If people living then had been asked what they thought being healthy meant, they may have replied 'avoiding infections, drinking clean water, living into my 50s/60s'. Death was frequently a result of highly infectious disease becoming epidemic in communities unprotected by immunisation or adequate sanitary conditions. However, in the last century, at least in developed countries, there has been a downturn in deaths resulting from infectious disease, and the 'top killers' make no mention of tuberculosis, typhoid or measles but instead list, for example, heart and lung disease, cancer and suicide. Table 1.1 shows the leading 'physical' causes of mortality in 2016 for Australian men and women (ABS, 2017).

Of note, the most common causes of death in Aboriginal people in Australia vary in many respects from those of non-indigenous Australians (ABS, 2017; see Table 1.2). Accidents, accidental poisoning and suicide are all on the list, as are cirrhosis and liver disease.

Many of the most common causes of death today have a behavioural component in that they have been linked to behaviour such as smoking, excessive alcohol consumption, increasingly sedentary lifestyles and poor diet. It has been estimated that between a third and half of cancer deaths are attributable, in part at least, to our behaviour (Vineis & Wild, 2014).

The upturn in cancer deaths over the last 100 years is in part because people are living longer with illnesses they previously would have died from; thus they are reaching ages where cancer **incidence** is greater. Nonetheless, a person's own behaviour does increase such disease risk significantly. Death rates from many of the top killers are slowly falling in most Western countries due to effective public health campaigns targeting behaviours such as smoking, and improvements in treatment. However, one disease which is not following this trend is diabetes. In Australia, the number of adults with diabetes has more than doubled since 1981 (International Diabetes Institute, 2006). The prevalence of diabetes is growing at a rate that is faster than any other chronic illness. Perhaps this reflects what has been described as the 'obesity' epidemic (see Chapters 3 and 4). Of note, diabetes is particularly prominent in the Aboriginal community, featuring second in the list of most common causes of death (see Table 1.2).

Worldwide, the leading causes of death differ. In 2000, in addition to those causes of death that are common in Australia (e.g. ischaemic heart disease, respiratory conditions and cancer) globally the top 10 causes of death also included preterm birth complications and birth trauma, HIV/AIDS, tuberculosis and diarrhoeal disorders. In 2015, HIV/AIDS and preterm birth and other complications are no longer cited as top 10 causes of death globally, indicating improvements in both the management of HIV/AIDS and improvements in maternal perinatal care. Despite these improvements, the World Health Organization (2014) has cited life expectancy in nine sub-Saharan African countries as still being under 55 years.

#### incidence

The number of new cases of disease occurring during a defined time interval—not to be confused with prevalence, which refers to the number of established cases of a disease in a population at any one time.

Table 1.1 Ten leading causes of death in Australian men and women in 2016	
Men	Women
1. Ischaemic heart disease	1. Dementia, including Alzheimer's disease
2. Trachea and lung cancer	2. Ischaemic heart disease
3. Dementia, including Alzheimer's disease	3. Cerebrovascular diseases
4. Cerebrovascular diseases	4. Chronic lower respiratory diseases
5. Chronic lower respiratory diseases	5. Trachea and lung cancer
6. Prostate cancer	6. Breast cancer
7. Colon and rectum cancer	7. Colon and rectum cancer
8. Diabetes	8. Diabetes
9. Blood and lymph cancer (including leukaemia)	9. Influenza and pneumonia
10. Suicide	10. Heart failure
Source: Australian Bureau of Statistics. (2017). Causes of death, Australia (Catalogue No. 3303.0). Canberra: ABS.	

#### Table 1.2 Most common causes of death in Aboriginal Australians (NSW, Qld, SA, WA and the NT), 2016

- 1. Ischaemic heart disease
- 2. Diabetes
- 3. Chronic lower respiratory diseases
- 4. Trachea and lung cancer
- 5. Suicide
- 6. Cerebrovascular diseases
- 7. Cirrhosis and liver disease
- 8. Accidents
- 9. Accidental poisoning
- 10. Dementia, including Alzheimer's disease

Source: Australian Bureau of Statistics. (2017). Causes of death, Australia (Catalogue No. 3303.0). Canberra: ABS.

It might be expected, given the changes in what people are dying from, that views of what health is may also have changed over time. In the eighteenth century, health was considered an 'egalitarian ideal', aspired to by all and considered as potentially being under an individual's control. Doctors were available to the wealthy as 'aids' to keeping oneself well. However, by the mid-twentieth century this had changed. New laws regarding sickness benefits, and medical and technological advances in diagnostic and treatment procedures are associated with health being inextricably linked to 'fitness to work'. Doctors were required to declare whether individuals were 'fit to work' or whether they could adopt the 'sick role' (see also Chapter 10). Many today continue to see illness in terms of its effects on their working lives, although some also look at work role and conditions and consider the effects it has on illness (see discussion of occupational stress in Chapter 11).

Another change is seen in the challenges to the assumption that traditional medicine can, and will, cure us of all ills. Over recent decades, many more people have acknowledged the potential negative consequences of some treatments, particularly pharmacological ones (consider, for example, the long-term use of anxiolytics such as Valium), and as a result the 'complementary' and 'alternative' medicine industry has burgeoned.

# Individual, cultural and lifespan perspectives on health

### Lay theories of health

If a fuller understanding of health and illness is to be attained, it is necessary to find out what people think health and illness are. The simplest way of doing this is to ask them. Here we explore lay perceptions of health.

In response to the question 'What does being healthy mean?' a classic early study by Baumann (1961) found that people with diagnoses of quite serious illness made three main types of response, whereby being healthy was considered to be:

- 1. a 'general sense of wellbeing'
- 2. identified with 'the absence of symptoms of disease'
- 3. seen in 'the things that a person who is physically fit is able to do'.

She argued that these three types of response reveal health to be related to:

- feeling
- symptom orientation
- performance.

Respondents in this study did not answer in discrete categories however, with nearly half of the sample providing two of the above response types, and 12% using all three types. This highlights the fact that the way we think about health is often multifaceted. A word of caution is also needed before generalising from these findings. Baumann's sample consisted of patients with diagnoses of quite serious disease, and it is likely that healthy people will think about health in a different way.

It has been shown that factors such as current health status do influence subjective views of health and reports of what 'health is'. For example, among almost 500 elderly people asked to rate factors in order of importance to their subjective health judgements, the most important factors emerging related to physical functioning and vitality (being able to *do* what you need/want to do). However, the current health status of the sample (poor/fair; good; very good/excellent) influenced judgements; for example, those in poor/fair health based their health assessment on recent symptoms or indicators of poor health, whereas those in good health considered more positive indicators (being able to exercise, being happy). Consistent with this, subjective health judgements were more tied to **health behaviour** in 'healthier' individuals (Benyamini, Leventhal & Leventhal, 2003).

Although some people have been shown to find it hard to distinguish health from an absence of illness, health is generally viewed as a state of equilibrium across various aspects of the person, encompassing physical, psychological, emotional and social wellbeing (e.g. Herzlich, 1973). Bennett (2000, p. 67) considers these representations of health to distinguish between health as 'being'—if not ill, then healthy; 'having'—health as a positive resource or reserve; and 'doing'—health as represented by physical fitness or function (as seen in Benyamini et al.'s study, above). Baumann's respondents appear to have focused more on the 'being' healthy and 'doing' aspects, which may be in part because 'having' health as a resource was not prominent in the minds of her patient sample. Similarly, Krause and Jay (1994) found that older respondents more often referred to health *problems* when making their appraisals, whereas younger respondents referred to health *behaviour*. The frames of reference drawn on by people asked to evaluate their own health status therefore also differ.

It does seem that health is considered differently when it is no longer present; it is considered to be good when nothing is wrong (perhaps more commonly thought in older people) and when a person is behaving in a health-protective manner (perhaps more commonly thought in younger people).

A more representative picture of the health concept is perhaps obtained from a large, question-naire-based *Health and Lifestyles* survey of 9003 members of the general public, of whom 5352 also completed an assessment seven years later (Cox, Huppert & Whichelow, 1993). This survey asked respondents to:

- Think of someone you know who is very healthy.
- Define who you are thinking of (friend/relative etc.—do not need specific name).
- Note how old they are.
- Consider what makes you call them healthy.
- Consider what it is like when you are healthy.

About 15% could not think of *anyone* who was 'very healthy', and about 10% could not describe what it was like for them to 'feel healthy'. This inability to describe what it is like to feel healthy was particularly evident in young males, who believed health to be a norm, a background condition so taken for granted that they could not put it into words. By comparison, a smaller group of mostly older women could not answer for exactly the opposite reason—they had been in poor health for so long that either they could not remember what it was like to feel well or they were expressing a pessimism about their condition to the interviewer (Radley, 1994, p. 39). The categories of health identified from the survey findings were:

- *Health as not ill:* that is, no symptoms, no visits to the doctor, therefore I am healthy.
- *Health as reserve*: that is, come from strong family, recovered quickly from an operation.
- *Health as behaviour*: usually applied to others rather than self; for example, they are healthy because they look after themselves, exercise, etc.
- Health as physical fitness and vitality: used more often by younger respondents and often in reference to a male—male health concept more commonly tied to 'feeling fit', whereas females had a

#### health behaviour

Behaviour performed by an individual, regardless of their health status, as a means of protecting, promoting or maintaining health (e.g. diet). concept of 'feeling full of energy' and rooted health more in the social world in terms of being lively and having good relationships with others.

- *Health as psychosocial wellbeing*: health defined in terms of a person's mental state, for example, being in harmony, feeling proud or, more specifically, enjoying others.
- *Health as function*: the idea of health as the ability to perform one's duties, that is being able to do what you want when you want without being handicapped in any way by ill health or physical limitation (relates to the World Health Organization's concept of *handicap*, now described as participation/participatory restriction—an inability to fulfil one's 'normal' social roles).

Such findings suggest that health concepts are perhaps even more complex than initially thought, with evidence that the presence of health is considered as something more than physical and encompassing of psychosocial wellbeing as well. Categories found seem to fit with Herzlich's 'being' and 'doing' categorisations (see Bennett, 2000, p. 66) and Baumann's findings of clusters of beliefs in 'health as not ill'. Generally, we can conclude that these dimensions of health are fairly robust (at least in Western culture; see later section for culture differences).

It is worth noting that subjective wellbeing ratings have been found to correlate strongly with objective health indicators (e.g. blood pressure and heart rate; Steptoe, Demakakos & de Oliveira, 2012) and also with wealth and educational levels (White, 2007). We discuss the 'wellbeing' concept more fully in relation to quality of life in Chapter 13 and note that health is only one component of these typically self-rated concepts. What is relevant here, however, is that subjective evaluations are typically reached through comparison with others, and in this way one's concept of what health is, or is not, can be shaped. For example, Kaplan and Baron-Lpel (2003) found that young Israelis reporting suboptimal health did not compare themselves with people of the same age, whereas many older people in suboptimal health did. When in optimal health, more young people than old compared themselves with people their age. This is interpreted as evidence that people try to get the best out of their evaluations—a young person will tend to perceive their peers as generally healthy, so if they feel that they are not, they will be less likely to draw this comparison. In contrast, older people in poorer health are more likely to compare themselves with same-aged peers, who may generally be thought to have normatively poorer health (thus their own health status seems less unusual). Asking a person to consider what it is that they would consider as 'being healthy' inevitably will lead people into making these types of comparisons. Health is a relative state of being.

### World Health Organization definition of health

The dimensions of health described in the preceding paragraphs are reflected in the WHO (1947) definition of health as a 'state of complete physical, mental and social wellbeing and . . . not merely the absence of disease or infirmity. This definition saw individuals as ideally deserving of a positive state—an overall feeling of wellbeing and fully functioning. This standpoint informed and helped shape global health targets, including their own Global Strategy for Health for All by the Year 2000 (WHO, 1981) and in 1998 the 'Health21—Health for all in the 21st century' declarations. Each of these had the aim of securing health security for all, global health equity, increased life expectancy and access for all to essential healthcare. Many national policy documents followed, with the nature, specificity and time frame of targets varying from country to country. In general, however, these set targets for reductions in deaths from the leading causes of cancers, heart disease, lung disease, strokes and more explicitly targeted the associated behaviours. For example, in England The Health of the Nation white paper, (Department of Health, 1992) and the Saving Lives: Our Healthier Nation report (Department of Health, 1999) and in the Netherlands Langer Gezond Leven [Towards a Longer and Healthier Life] (Ministry of Health, Welfare & Sport 2003), the targets were disease incidence reductions, whereas in Belgium the targets were more behavioural: reducing smoking behaviour, fat intake, fatal accidents, increasing uptake of vaccination programs and increasing health screening in the over-50s. In Australia, the National Health Priority Areas (NHPAs) initiative was Australia's response to the World Health Organization's global strategy. The initial 1996 set of NHPAs included cardiovascular health, cancer control, injury prevention and control, and mental health. Diabetes mellitus was added in 1997, followed by asthma in 1999,

#### psychosocial

An approach that seeks to merge a psychological (more micro- and individually oriented) approach with a social approach (macro-, more community and interaction oriented), for example, to health.

arthritis and musculoskeletal conditions in 2002, and obesity in 2008 (AIHW, 2011). While these areas were targeted, specific goals and time frames were not specified.

### Cross-cultural perspectives on health

What is considered to be 'normal' health varies across cultures and is a result of the economic, political and cultural climate of the era in which a person lives. Cultures vary in their health belief systems, health attributions and health practices. Think of how pregnancy is treated in most Western civilisations (i.e. medicalised) as opposed to many developing regions (naturalised). The stigma of physical disability, mental illness or of dementia among South Asian communities may have consequences for the family which would not be considered in Caucasian families; for example, having a sibling with a disability, or a relative with dementia or depression, may affect siblings' marriage chances or even the social standing of the family (Ahmad, 2000; Mackenzie, 2006; Moriarty, Sharif & Robinson, 2011). The way in which certain behaviour is viewed also differs across time and between cultures. For example, alcohol dependence has shifted from being regarded as a legal and moral problem with abusers seen as deviant, to being a disease treated in clinics; and smoking has shifted from being considered as glamorous and even desirable to being socially undesirable and indicative of a weak will. Perhaps reflecting this shift, the prevalence of Australian males who smoke has steadily declined since 1945 (when 75% of men smoked) to 2007 (only 21%). Similarly, rates have declined overall for women from 26% in 1945 to 18% in 2007, although rates for women increased to 33% in 1976, before starting to decline (QuitVictoria, 2011; and see Chapter 3).

Westernised views of health differ in various ways from conceptualisations of health in non-Westernised civilisations. Chalmers (1996) astutely notes that Westerners divide the mind, body and soul in terms of allocation of care between psychologists and psychiatrists, medical professions and the clergy, whereas in some African cultures, these three 'elements of human nature' are integrated in terms of how a person views them, and in how they are cared for. This **holistic** view is similar to that found in Eastern and in Aboriginal Australian cultures (e.g. Swami et al., 2009) where the social (e.g. social and community norms and rituals) as well as the biological, the spiritual and the interpersonal, are integral to explaining health and illness states.

Spiritual wellbeing as an aspect of health has gained credence following inclusion in many quality-of-life assessments (see Chapter 13) and, although faith or God's reward may sometimes be perceived as supporting health, attributing one's health to a satisfied ancestor may nonetheless raise a few eyebrows if stated aloud. Negative supernatural forces such as 'hexes' or the 'evil eye' sometimes share the blame for illness and disability; for example, Jobanputra and Furnham (2005) found that, when compared with British Caucasians, British Gujarati Indian immigrants more often endorsed such causes of illness. Among Hindus and Sikhs, in particular, it has been reported that disability, and even dementia, may be considered a punishment for past sins within the family (Katbamna, Bhakta & Parker, 2000; Mackenzie, 2006). Such belief systems can have profound effects on living with illness or, indeed, caring for someone with an illness or disability.

In addition to beliefs of spiritual influences on health, studies of some African regions consider that the community or family work together for the wellbeing of all. This **collectivist** approach to staying healthy and avoiding illness is far different from our **individualistic** approach to health (consider how long the passive smoking evidence was ignored). Generally speaking, Western European cultures are found to be more individualistic, with Eastern and African cultures exhibiting more holistic and collectivist approaches to health. For example, in a study of preventive behaviour to avoid endemic tropical disease in Malawians, the social actions to prevent infection (e.g. clearing reed beds) were adhered to more consistently than the personal preventive actions (e.g. bathing in piped water or taking one's dose of chloroquine) (Morrison, Ager & Willock, 1999).

Several Eastern cultures (Japanese, Chinese) also exhibit holistic and collectivist approaches to health. For example, a review of the literature on coronary heart disease in Chinese Australians (Daly et al., 2002) found Chinese people are less inclined to express individual needs unless they are encouraged to and that they may appear to passively accept illness as this allows 'fate' to take its course. (For information about collectivism in the Australian health

#### holistic

Root word 'wholeness'; holistic approaches are concerned with the whole being and its wellbeing, rather than addressing the purely physical or observable.

#### collectivist

A cultural philosophy that emphasises the individual as part of a wider unit and places emphasis on actions motivated by collective, rather than individual, needs and wants.

#### individualistic

A cultural philosophy that places responsibility at the feet of the individual; thus behaviour is often driven by individual needs and wants rather than by community needs or wants.

context, see Körner, 2007.) Following a comparative study of Canadian and Japanese students, Heine and Lehman (1995) highlighted a need to distinguish between cultures that promote and validate 'independent selfs' (i.e. find meaning through uniqueness and autonomy), and cultures that promote and validate 'interdependent selfs' (i.e. find meaning through links with others and one's community) (Morrison, Ager & Willock, 1999, p. 367). Cultures that promote an interdependent self are more likely to view health in terms of social functioning rather than simply personal functioning, fitness and so on. Several research studies by George Bishop and colleagues (e.g. Quah & Bishop, 1996; Bishop & Teng, 1992) have noted that Chinese Singaporean adults view health as a harmonious state where the internal and external systems are in balance, and on occasions where they become imbalanced, health is compromised. Yin—the positive energy—needs to be kept in balance with the Yang—the negative energy (also considered to be female!). Eastern cultures hold spiritual beliefs about health and illness, with illness or misfortune commonly being attributed to predestination.

With respect to Aboriginal and Torres Strait Islander people, it has been suggested that compared to Western conceptions of health a more holistic belief of health is shared. The body is seen as the locus of social relationships and therefore health cannot be separated from community, spiritual and other elements of identity (for more information on Aboriginal health beliefs see Maher, 1999). This is important, because Aboriginal people, when asked about their views of cancer, indicated a number of misunderstandings including that cancer was contagious or had spiritual implications, and these beliefs were found to be a barrier for accessing medical treatment in cancer-related services (Shahid, Finn, Bessarab & Thompson, 2009).

Clearly, therefore, to maximise effectiveness of health promotion efforts, it is important to acknowledge the existence and effects of such different underlying belief systems and resultant behaviours (Ypinazar, Margolis, Haswell-Elkins & Tsey, 2007; see Chapters 6 and 7). It is worth noting that variations exist within, not just between cultures, especially where there may have been exposure to multiple cultural influences (Tov & Diener, 2007). This is also reported by Wong, Ho, Shin and Tsai (2011) from studies in Singapore where both Asian and Western influences coexist but have differential effects on subjective wellbeing ratings.

In the Western world, the perceived value of alternative remedies for health maintenance or treatment of symptoms is seen in the growth of alternative medicine and complementary therapy industries, however, Western medicine dominates. In contrast, in non-Western countries a mixture of Western and non-medical/traditional medicine can be found. For example, in sub-Saharan Malawi, a person may visit a faith healer or a herbalist as well as a local Western clinic for antibiotics (Ager, Carr, MacLachlan & Kaneka-Chilongo, 1996) and in Malaysia, while Western-style medicine is dominant, traditional medicine practice by 'bomohs' (faith healers) is still available (Swami et al., 2009). Similarly, among some Aboriginal tribes spiritual beliefs in illness causation coexist with the use of Western medicines for symptom control (Devanesen, 2000).

However, one study reported that some Aboriginal Australians still use traditional medicine for treating their cancer. Such healing processes and medicines were preferred by some because it helped reconnect them with their heritage, land, culture and the spirits of their ancestors, bringing peace of mind during their illness. Spiritual beliefs and holistic health approaches and practices played an important role in the treatment choices for some patients (Shahid, Bleam, Bessarab & Thompson, 2010).

These examples illustrate that the biomedical view is acknowledged and assimilated within different culture's belief systems, and show that, while access to and understanding of Western medicine and its methods and efficacy grows, better understanding of culturally relevant cognitions regarding illness and health behaviour is needed (see Kitayama & Cohen, 2007; Vaughn, Jacquez & Baker, 2009). We need more research which considers the role religion plays in health across and within cultures. Swami et al. (2009), for example, in their study of 721 Malaysian adults, found that Muslim participants had higher beliefs in religious factors and fate as influences on recovering from illness than did Buddhist or Catholic participants and they were also more likely to believe that their likelihood of becoming ill was uncontrollable.

As we discuss in a later chapter (Chapter 9), the use of healthcare, either traditional or Western, will in part be determined by the nature and strength of such cultural values and religious beliefs.



Photo 1.2 Visiting a herbalist to choose individually tailored remedies

Source: Corbis Premium RF/Alamy Images

Illness discourse will reflect the dominant conceptualisations of individual cultures and religions and, in turn, how people think about health and illness will shape expectations, behaviour, and use of health promotion and healthcare resources. Furthermore, what is normal (or deviant) and what is defined as sick (reflecting illness) in a given culture can have consequences for how others respond: consider how societal responses to illicit drug use have ranged from prohibition through criminalisation to an illness requiring treatment.

### Lifespan, ageing and beliefs about health and illness

Psychological wellbeing, social and emotional health are affected by illness, disability and hospitalisation, which can be experienced at any age. Although growing older is associated with decreased functioning and increased disability or dependence, it is not simply older people who experience longstanding illness, as evidenced the National Health Survey, which found that 12% of children aged between 0 and 14 had asthma and another 17.5% had mental or behavioural problems (ABS, 2016). There are developmental issues which health professionals should be aware of if they are to promote the physical, psychological, social and emotional wellbeing of their patient or client. While the subsequent section introduces lifespan issues in relation to health perceptions, it is recommended that interested readers also consult a developmental health psychology text, such as Resnick and Rozensky's (1997) edited collection or the newer text by Turner-Cobb (2014).

#### Developmental theories

The developmental process is a function of the interaction between three factors:

- 1. Learning: a relatively permanent change in knowledge, skill or ability as a result of experience;
- 2. Experience: what we do, see, hear, feel, think;
- 3. *Maturation:* thought, behaviour or physical growth, attributed to a genetically determined sequence of development and ageing rather than to experience.

Erik Erikson (Erikson, 1959; Erikson, Erikson & Kivnick, 1986) described eight major life stages (five related to childhood development, three related to adult development), which varied across different dimensions, including:

- cognitive and intellectual functioning
- language and communication skills
- the understanding of illness
- healthcare and maintenance behaviour.

Each of these dimensions is important when examining health and illness perceptions or behaviour. Deficits or limitations in cognitive functioning (due to age, accident or illness) may, for example, influence the extent to which an individual can understand medical instructions, report their emotions or have their healthcare needs assessed. Communication deficits or limited language skills can impair a person's willingness to place themselves in social situations, or impede their ability to express their pain or distress to health professionals or family members. The understanding an individual has of their symptoms or their illness is crucial to healthcare-seeking behaviour and to adherence, and individual health behaviour influences one's perceived and/or actual risk of illness and varies hugely across the lifespan. All these aspects are covered in this textbook in the relevant chapters. We cannot, for example, assume that explanations or models of adult behaviour or adult decision-making can be applied to children, given normative cognitive development, or to adolescents, given variations in the salience of social influence (Holmbeck, 2002).

A maturational framework for understanding cognitive development (Piaget, 1930, 1970) has provided a good basis for understanding the developmental course of concepts regarding health, illness and health procedures. Piaget proposed a staged structure to which, he considered, all individuals follow in sequence as below:

- 1. Sensorimotor (birth—2 years): an infant understands the world through sensations and movement, but lacks symbolic thought and moves from reflexive to voluntary action.
- 2. *Pre-operational* (2–7 years): symbolic thought develops by around age 2, thereafter simple logical thinking and language develop, generally **egocentric**.
- 3. Concrete operational (7–11 years): abstract thought and logic develop hugely; can perform mental operations (e.g. mental arithmetic) and manipulate objects.
- 4. Formal operational (age 12 to adulthood): abstract thought and imagination develop as does deductive reasoning. Not everyone may attain this level.

Piaget's work has been influential in terms of providing an overarching structure within which to view cognitive development. Of more relevance to a health psychology text, however, is work that more specifically addresses children's developing beliefs and understanding of health and illness constructs. We describe some of this work now, using Piagetian stages as a broad framework.

### Sensorimotor and pre-operational stage children

Little work with infants at the sensorimotor stage is possible in terms of identifying health and illness cognitions, as language is very limited until the end of this stage. At the pre-operational stage, children develop linguistically and cognitively, and symbolic thought means that they develop awareness of how they can affect the external world through imitation and learning, although they remain very egocentric. In pre-operational children, health and illness are considered in black and white (i.e. as two opposing states rather than as existing on a continuum). Children are slow to see or adopt other people's viewpoints or perspectives, which is crucial if one is to empathise with others. Thus a pre-operational child is not very sympathetic to an ill family member, not understanding why this might mean they receive less attention.

#### Illness concept

It is important that children learn over time some responsibility for maintaining their own health; however, few studies have examined children's conception of health which would be likely to influence health behaviour. Research has focused more often on generating illness concepts. For example, Bibace and Walsh (1980) asked children aged 3–13 questions about health and illness, and suggested that an illness concept develops gradually. The questions were about knowledge—'What

#### egocentric

Self-centred, such as in the pre-operational stage (age 2–7 years) of children, when they see things only from their own perspective (cf. Piaget).

is a cold?'; experience—'Were you ever sick?'; attributions—'How does someone get a cold?'; and recovery—'How does someone get better?' Responses revealed a progression of understanding and attribution for causes of illness, and six developmentally ordered descriptions of how illness is defined, caused and treated emerged. Under-7s generally explain illness on a 'magical' level—explanations are based on association:

- *Incomprehension:* child gives irrelevant answers or evades the question (e.g. sun causes heart attacks).
- *Phenomenonism:* illness is usually a sign or sound that the child has at some time associated with the illness, but with little grasp of cause and effect (e.g. a cold is when you sniff a lot).
- Contagion: illness is usually from a person or object that is close by, but not necessarily touching
  the child; or it can be attributed to an activity that occurred before the illness (e.g.: 'You get
  measles from people'. If asked how? 'Just by walking near them').

#### **\*** Concrete operational stage children

Children over 7 are described by Piaget as capable of thinking logically about objects and events, although they are still unable to distinguish between mind and body until around age 11, when adolescence begins.

#### Illness concept

Bibace and Walsh describe explanations of illness at around 8 to 11 years as being more concrete and based on a causal sequence:

- Contamination: children at this stage understand that illness can have multiple symptoms, and they recognise that germs, or even their own behaviour, can cause illness (e.g. 'You get a cold if you get sneezed on, and it gets into your body')
- Internalisation: illness is within the body, and the process by which symptoms occur can be partially understood. The cause of a cold may come from outside germs that are inhaled or swallowed and then enter the bloodstream. These children can differentiate between body organs and function and can understand specific, simple information about their illness. They can also see the role of treatment and/or personal action as returning them to health.

In this concrete operational stage, medical staff are still seen as having absolute authority, but their actions might be criticised/avoided (e.g. reluctance to give blood, accusations of hurting unnecessarily, etc. may appear as children can now begin to weigh up the pros and cons of actions). Children can be encouraged to take some personal control over their illness or treatment at this stage in development which can help the child to cope. They also need to be encouraged to express their fears. Parents need to strike a balance between monitoring a sick child's health and behaviour and being overprotective, as this can detrimentally affect a child's social, cognitive and personal development and may encourage feelings of dependency and disability.

#### Adolescence and formal operational thought

Adolescence is a socially and culturally created concept only a few generations old, and indeed many primitive societies do not acknowledge adolescence, and instead children move from child-hood to adulthood with a ritual performance rather than the years of transition Western societies consider a distinct period of life. Puberty is a period of both physical and psychosocial change. During early adolescence (11–13 years), as individuals prepare for increased autonomy, independence and peers take on more credence than parents, much of life's health-damaging behaviour commences (e.g. smoking).

#### Illness concept

Bibace and Walsh (1980) described illness concepts at this stage as being at an abstract level, based on interactions between the person and their environment:

■ Physiological: children now reach a stage of physiological understanding where most can define illness in terms of specific bodily organs or functions (e.g. germs cause white blood cells to

- become active to try and fight them), and begin to appreciate multiple physical causes (e.g. genes plus pollution plus behaviour).
- *Psychophysiological:* in later adolescence (from around 14 years) and in adulthood, many people grasp the idea that the mind and body interact, and understand or accept the role of stress, worry and so on, in the exacerbation and even the cause of illness. However, many people of all ages fail to achieve this level of understanding about illness and continue to use more cognitively simplistic explanations.

It should be noted that Bibace and Walsh's 1980 study focused predominantly on the issue of illness causality, and these findings have been supported by more recent work of Koopman and colleagues (Koopman, Baars, Chaplin & Zwinderman, 2004). Extending illness cognitions further, other work has shown that children and young people are able to think about health and illness in terms of other dimensions, such as controllability and severity (e.g. Forrest, Plumb, Ziebland & Stein, 2006; Gray & Rutter, 2007).

Adolescents perceive more personal control over the onset and course of illness and are more aware that their actions can influence outcomes. Advice and interventions are more fully understood as are complex remedial and therapeutic procedures (e.g. they understand that taking blood can help monitor the progress of a disease or a treatment). They may, however, choose to be non-adherent if treatment is thought to disrupt one's goals or lose peer approval, and efforts to minimise a child's autonomy (from pre-adolescence) can be counterproductive (Holmbeck et al., 2002).

Childhood is an important period for the development of health and illness concepts and also for the development of attitudes and patterns of health behaviour that will impact on future health status. According to these staged theories, a child's ability to understand their condition and associated treatment is determined by the level of cognitive development attained. This level of understanding will subsequently determine how children communicate their symptom experience to parents and healthcare staff, their ability to act on health advice and the level of personal responsibility for disease management that is feasible. These aspects should not be overlooked when care and educational programs are developed. While cognitive development is important, such staged theories have not met with universal support (e.g. Dimigen & Ferguson, 1993, in relation to concepts of cancer). Illness concepts are now thought to derive more from a range of influences, such as experience and knowledge, than from relatively fixed stages of cognitive development (see RESEARCH FOCUS).

#### **※** *Adulthood 17/18*+

Adulthood tends to be divided between early (17–40), middle age (40–60) and elderly (60/65+). Early adulthood blends out of adolescence as the person forges their identity and assumes the roles and responsibility of adulthood—a time of consolidation. In contrast Laslett (1996), describes the years from 3–13 as the '1st age' where dependency, childhood and education are key, and adolescence and adulthood are considered as the '2nd age', a period of developing independence, maturity and responsibility. Early adulthood typically sees all sorts of transitions, such as graduating from school and college, taking on new careers, pregnancy, marriage and childbirth. Many will divorce, some will lose a parent. Although Piaget did not describe further cognitive developments during adulthood, new perspectives develop from experience across the lifespan, and what is learned is ideally applied to achieving future life goals.

Adults are less likely than adolescents to adopt new health-risk behaviour and are generally more likely to engage in protective behaviour (e.g. screening, exercise, etc. for health reasons). Transitions in adulthood do not affect all sectors of the adult population in the same way: for example, marriage was found to benefit health in men, that is they have lower illness scores than men living alone—whereas for women, being married carries no such protection (Macintyre, 1986; Blaxter, 1987), perhaps suggesting differential social support. However changes in the workforce, with more married women now also working than was the case in the 1980s when these studies were conducted, mean that such findings may not persist.

While early adulthood is generally viewed positively, middle age has been identified as a period of doubts and anxiety, reappraisal and change. Some of this is triggered by uncertainty of roles



Photo 1.3 Which of these children are healthy? You can't always tell by looking. Neither would you know by looking into which of these rated themselves as 'extremely healthy' would you? Health is more than objective symptoms.

Source: Robert Kneschke/Fotolia.com

when children become adults and leave home (i.e. 'the empty nest' syndrome), some is triggered by awareness of physical changes—greying hair, weight gain, stiff joints, etc. Positive health behaviour changes may follow:



Is middle age a state of mind? Are you 'as young as you feel'?

Think of your parents, aunts and uncles or family friends in their 40s and 50s. Do they seem to share outlooks on life, expectancies and behaviours that are significantly different to those of you and your friends? How do you view growing older? Think about how it makes you feel and question these feelings.

#### \* Ageing and health

In Australia, as elsewhere in the world, the ageing population has burgeoned. According to ABS data, 15% of the population were aged over 65 in 2016, and particularly the percentage of persons living into their late 70s or 80s has increased (ABS, 2017; for further information see AIHW, 2016) and is projected to increase further. The United Nations Secretariat (2002) has predicted an increase in those aged over 60 from 10% of the world population to 20% by 2050. The



### Children's conceptions of health: how complex are they?

Adapted from Almqvist, L., Hellnäs, P., Stefansson, M., and Granlund, M. (2006). 'I can play!' Young children's perceptions of health. *Pediatric Rehabilitation*, 9(3), 275–284.

#### **Background**

It is known that the understanding of health and illness concepts develops over the course of childhood in concert with the developing cognitive abilities of the child. However, there is relatively little research that focuses on the early development of illness concepts. The Piagetian developmental stages reviewed in the preceding pages suggest that very young children may struggle to develop multifactorial conceptions of health that are similar to those reviewed earlier in this chapter that adults hold. But do we give children too little credit?

#### **Aims**

The study aimed to describe 4–5-year-old children's conceptions of health in relation to four separate aspects associated with poor health, namely: body, activity, participation and environment.

#### **Methods**

68 children between the ages of 4 and 5 years old (55% boys) were recruited into the study. Participation involved a structured interview, which was based on an earlier study by Normandeau, Kalnins, Jutras and Hanigan (1998) in which a large cohort of children (n=1674) were surveyed and interviewed to establish the developmental trajectory of illness concepts. Children were assessed in terms of what is described as 'four complementary dimensions': (1) criteria of good health—'Can you tell me the name of two or three friends who are healthy?', 'Why do you think these friends feel well?'; (2) behaviours necessary to maintain health—'Tell me what you should especially do to be healthy'; (3) consequences of being healthy—'What can you do when you are feeling well?' and (4) Perceived threats to health—'Tell me what you think can happen so that you don't feel well?'.

#### Results

The previous study relied on both **quantitative methods** and **qualitative methods**. In this study, only qualitative data was analysed. Qualitative data were coded using content analysis which aimed to identify themes that emerged from the data. From the themes, subcategories were generated and subjected to a latent content analysis in order to develop categories of illness-related constructs described by the children.

In response to the questions, even such young children were able to perceive health as being multifaceted. Regardless of the question, children were able to give answers that fit in each of the four categories. The children generally identified four main criteria for good health:

- 1. *Body*: children were able to explain that when you are sick it affects your body in terms of disease, infection, pain, emotions and medication. A small proportion of children were able to identify that when your body fails, death can result.
- 2. Activity: children understood that when you are sick, you should rest and may do so with a number of 'quiet activities'.
- 3. *Participation*: was seen as a sign of wellness rather than illness. That is, health was seen as necessary to participate and play with friends.
- 4. *Environment*: children understood that when they were well, they went to daycare; but they did not when they were ill. In fact, many children knew that rather than going to daycare when you are sick, you often visit the doctor.

# qualitative methods

Concerned with describing (qualifying) the experiences, beliefs and behaviours of a particular group of people.

# quantitative methods

Concerned with counting (quantifying) the frequency or level of experiences, beliefs and behaviours of a large, ideally representative, group of people.

Components of these dimensions showed across each of the four questions that were asked, with body being the most commonly endorsed, followed by activity and then environment.

#### **Discussion**

What this study clearly shows is that children as young as 4 or 5 have multidimensional concepts of health that are more complex than simply a change from concrete to abstract thinking as described by Piaget (1930, 1970) or Bibace and Walsh (1980). Regardless of the question, children showed an understanding that ill health affected not only their body, but also what they were able to do, where they were likely to go and who they were able to do it with. These varied aspects of health were present in response to each specific question. Importantly, the children in this study were able to appreciate that the way in which individuals behave influences their health and also that their health influences what they are able to do. Thus, the children had complex constructs of illness and its relationship to what we do and what we feel.

#### Strengths and limitations

This was a small study that relied on convenience sampling that asks young children to express their own views and beliefs. Although the study seems small, for qualitative research, the sample size is relatively large. However, the study does not address actual behavioural practices and therefore there is no check on whether children report conceptions that are consistent or inconsistent with their actual behaviour. Further, because the study is qualitative, larger quantitative studies are needed to confirm and test the hypotheses arising from this study.

#### epidemiology

The study of patterns of disease in various populations and the association with other factors such as lifestyle factors. Key concepts include mortality, morbidity, prevalence. incidence, absolute risk and relative risk. Types of questions: Who gets this disease? How common is it?

#### self-concept

Those conscious thoughts and beliefs about yourself that allow you to feel you are distinct from others and that you exist as a separate person.

implications for health and social care resources are obvious, given the **epidemiology** of illness (i.e. the fact that the incidence of many diseases increases with longevity). Not all elderly people are ill or infirm, but even among the minority who go on without chronic health problems (physical and/or mental), episodes of acute illness are commonplace.

In Australia, as elsewhere, long-term health conditions are more common with increasing age. In an Australian primary care sample of 1281 older adults, 50% of those aged 65 or above reported arthritis, 29% cardiac diseases, 19% had diabetes and 17.5% respiratory conditions (Sharpe et al., 2017). Furthermore, multimorbidity, the experience of two or more chronic health conditions, was present in 56% of the sample. In other words, more people than not had at least two chronic conditions. The number of illnesses that a person reported, the more likely they were to report depressed mood.

What does the process of ageing bring to a person in terms of how they think about themselves and their health? Empirical research has shown that **self-concept** is relatively stable through ageing (e.g. Baltes & Baltes, 1990) and that changes in self-concept are not an inevitable part of the ageing process. In fact, ageing is not necessarily a negative experience (although it may become so because of the ageist attitudes that exist in many industrialised countries). Growing older may present an individual with new challenges, but this should not be seen as implying that ageing is itself a problem (Coleman, 1999).

With increasing age, sensory and motor losses are most common, with a large proportion of our elderly being physically impaired in some way. In an ageing society disability is common; 85% may experience some chronic condition (Woods, 2008). Elderly people often report expecting to have poor health, which can result in poor healthcare checks and maintenance as they regard them as pointless. They may view loss of mobility, poor foot health and poor digestion as an inevitable and unavoidable part of growing old and may not respond to symptoms as they should (e.g. Leventhal & Prohaska, 1986; Sarkisian, Liu, Ensrud, Stone & Mangione, 2001). Exercise tends to decline in old age as it may be avoided in the belief that it will over-exert the joints, heart and so on. The elderly tend to underestimate their own physical capacities, yet exercise is both possible and beneficial. There is growing interest in 'successful ageing'—what it is and how it can be achieved. The

section that follows describes some of the models of successful ageing and empirical evidence that supports a multidimensional 'lay model' of predicting quality of life rather than a biomedical model based on physical and mental functioning.

#### Successful ageing

Bowling and Iliffe (2006) describe five progressively more inclusive 'models' of successful ageing and the variables considered within each model. Variables were all categorised or dichotomised (e.g. presence/absence of diagnosis; sense of purpose/no sense of purpose, etc.), in order for each model to identify whether a person was 'successfully aged' or not:

- 1. Biomedical model: based on physical and psychiatric functioning—diagnoses and functional ability.
- 2. Broader biomedical model: as above but includes social engagement and activity.
- 3. *Social functioning model:* based on the nature and frequency of social functioning and networks, social support accessed.
- 4. *Psychological resources model:* based on personal characteristics of optimism and self-efficacy and on sense of purpose, coping and problem-solving, self-confidence and self-worth.
- 5. *Lay model*: based on the above variables plus socioeconomic variables of income and 'perceived social capital', which included access to resources and facilities, environmental quality and problems (e.g. crime, traffic, pollution, places to walk, feelings of safety).

The study assessed all the above variables in a sample of 999 individuals aged over 65 years and assigned them either as successfully aged or not based on achieving the 'good' score on each variable (e.g. no physical conditions versus one or more). The authors then tested which of these models 'best' distinguished those participants that rated quality of life (QoL) as 'Good' (included 'So good, could not be better', or 'Good') instead of 'Not good' (included 'Alright' or 'So bad, could not be worse').

Although each model could independently predict QoL, the strongest prediction was achieved by the lay model. Those individuals who scored as 'successfully aged' on the basis of lay model variables were more than *five* times more likely to rate their QoL as 'good' rather than 'not good'. The odds of a 'good' QoL rating versus 'not good' was next best among those classified on the broader biomedical model (3.2 times more likely), than the biomedical model (2.6 times more likely), the psychological (2.4 times more likely) and social models (1.99 times more likely).

Such findings highlight the importance of multidimensional models of health in that medical or psychological or social variables are all important, but a more holistic model is 'better'. A broader model also opens up a range of opportunities for intervention; the challenge now is to use such findings to develop and evaluate health promotion interventions with older populations. Of note, however, is that the sample in this study was 98% white and thus the model of successful ageing best associated with QoL in this sample may not hold for non-white samples.

This chapter has described what is often meant by 'health'. In focusing on health, we have acknowledged that health is a continuum, not simply a dichotomy of sick versus healthy. Most of us will experience in our lifetime varying degrees of health and wellbeing, with periods of illness at one extreme and optimal wellness at the other. Some may never experience optimal wellness. 'Health refers to a state of being that is largely taken for granted' (Radley, 1994, p. 5) and is often only appreciated when lost through illness. In the final section of this chapter, we want to introduce what is broadly considered as the discipline of health psychology. The final chapter of this book addresses careers in health psychology.

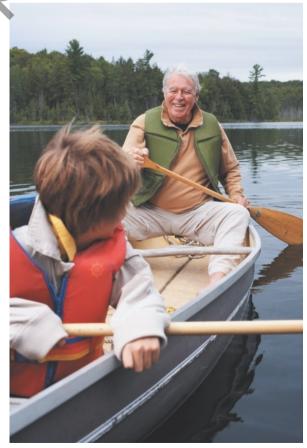
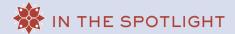


Photo 1.4 Many activities can be enjoyed at any age. Source: Radius Images/Alamy Images



### Measuring self-rated or subjective health status

Health is commonly viewed in terms of how we feel and what we do. Our 'health status' is not simply whether we are alive or dead, nor is it defined simply on the basis of the presence or absence of symptoms—it is something we perceive for ourselves, sometimes referred to as 'subjective health status' as shown in the sample in Figure A. Generally, the relationship between



Figure A Adults' self-reported health status, 2010 Source: Self-perceived health by level of perception, Eurostat, 2016.

subjective health and markers of 'objective' health is weak (e.g. Berg, Hassing, McClearn & Johansson, 2006); however, self-ratings of health (SRH), often assessed as a simple single item (e.g. 'How is your health in general?'), have been found to predict major health outcomes, including mortality (e.g. Bond et al., 2006; Sargent-Cox, Anstey & Luszcz, 2010). In almost all European countries, the majority of the adult population will rate their health as good or very good, although this does not mean that the actual health within the countries depicted is 'objectively' better. These are self-reports, and with this type of data come some challenges.

Data are potentially influenced by the age composition of the sample, and furthermore the same associations are not always found for both genders. For example, Deeg and Kriegsman (2003) find a relationship between SRH and health outcomes only for men. Across all EU countries sampled for the data presented in Figure 1.1 (OECD, 2012a), men were more likely to rate their health as good or better, and rating declined markedly after age 45 in many countries and then again after age 65. Socioeconomic influences on reports are also reported (OECD, 2012b).

Addressing measurement issues, Sargent-Cox et al. (2010) conducted a study of over 2000 Australian adults over the age of 65, who were assessed seven times between 1992 and 2004. They used three different measures of SRH—comparing self with previous self (a temporal comparison); comparing self with other people of the same age (an age-group comparison); and a no-comparison global rating (simply rated current health). They hypothesised that the age-group social comparison would show a positive SRH as the sample increasingly engaged in downward social comparison (with those worse off) so as to enhance their self-rating, and that the temporal comparison would show worsened SRH. In fact, all three ratings worsened over time but the extent and rate of worsening varied: the global rating showed a steep decline over the 12 years; contrary to expectations, the age-group comparative ratings became more negative (particularly in men who were older than 65 on commencement), and self-comparative ratings became more negative although a ceiling effect is reported whereby, over time, they are more likely to rate their self as having stayed the same as previously.

Findings such as this are important in highlighting that the measures we use can influence the results we find and thus the interpretations we make. For example, a self-comparison measure is seen to plateau in the context of an ageing population, perhaps out of a feeling that 'my health cannot get any worse' (and so, by scoring SRH as being the 'same as the year previously', this could be misinterpreted as implying that health is better than expected given the passing of time—if we assume actual health deteriorates over this time). Such findings also have relevance for other age groups, and for constructs other than self-rated health (for example, a comparator, made in questions regarding drinking behaviour or disease risk, can also change responses).

# What is health psychology?

Psychology can be defined as the scientific study of mental and behavioural functioning. Studying mental processes through behaviour is limited, however, in that not all behaviour is observable (e.g. is thought not behaviour?) and thus for many aspects of human behaviour we have to rely on self-report, the problems of which are described elsewhere.

Psychology aims to describe, explain, predict and where possible intervene to control or modify behavioural and mental processes, from language, memory, attention and perception to emotions, social behaviour and health behaviour, to name just a few. The key to scientific methods employed by psychologists is the basic principle that the world may be known through observation or **empiricism**. Empirical methods go beyond speculation, inference and reasoning to actual and systematic analysis of data. Scientific research starts with a theory, which can be defined as a general set of assumptions about how things operate in the world. Theories can be vague and poorly defined (e.g. I have a theory about why sports science students generally sit together at the back of

#### empiricism

Arising from a school of thought that all knowledge can be obtained through experience. lectures) to very specific (e.g. sports science students sit at the back of lectures because they feel like 'outsiders' when placed with the large numbers of psychology majors). Psychologists scientifically test the validity of their hypotheses and theories. On an academic level this can increase understanding about a particular phenomenon, and on an applied level it can provide knowledge useful to the development of interventions.

Psychologists use scientific methods to investigate all kinds of behaviour and mental processes, from the response activity of a single nerve cell to the role adjustments required in old age. Different kinds of psychologists will employ different methods, and this text highlights those that are most commonly employed by health psychologists; for example, the use of questionnaires, interviews and psychometric assessments (such as of personality).

### What connects psychology to health?

As introduced in this chapter, people have beliefs about health, are often emotional about it and have a behavioural role to play in maintaining their health and coping with illness. Health psychology can address questions such as why some people behave in a healthy way and others do not. Is it all a matter of personality? Does a person who behaves in a healthy manner in one way (e.g. doesn't smoke), also behave healthily in other ways (e.g. attend dental screening)? Are we rational and consistent beings? Do gender, age and socioeconomic status affect health either directly or indirectly via their effects on other things? Why do some people appear to get ill all the time while others stay healthy? Health psychology integrates many cognitive, developmental and social theories and explanations, but it applies them solely to health, illness and healthcare. You may want to pick up an introductory psychology text and look at the learning, motivation, social, developmental and cognitive sections in more detail.

The main goals of health psychology, derived from Matarazzo's (1982) definition, are to develop our understanding of biopsychosocial factors involved in:

- the promotion and maintenance of health
- improving healthcare systems and health policy
- the prevention and treatment of illness
- the causes of illness (e.g. vulnerability/risk factors).

Unlike some other domains of psychology (such as cognitive science), health psychology can be considered as an applied science, although not all health psychology research is predictive. For example, some research aims only to *quantify* (e.g. what percentage of school pupils drink underage?) or *describe* (e.g. what are the basic characteristics of underage drinkers, such as age, sex, socioeconomic status?) Descriptive research ideally provides the foundation for the generation of more causal questions (e.g. what is it about low socioeconomic status that increases the incidence of risky behaviour?). By simply measuring health beliefs and attitudes, we can begin to grapple with the issue of predictors before developing interventions.

#### Health psychology and other fields

Health psychology has grown out of many fields within the social sciences. It has adopted and adapted models and theories originally found in social psychology, behaviourism, clinical psychology, cognitive psychology and so on. Health psychology in Australia is, as in the USA, linked with other health and social sciences (e.g. health economics, behavioural medicine, medical sociology) and with medicine and allied therapeutic disciplines. Few academic or practitioner health psychologists work alone; most are involved in an array of inter- and multidisciplinary work.

There are several contrasts with other popular disciplines, as outlined in the following sections, each of which may vary in terms of methods of assessment, research, treatment and intervention.

#### Medical psychology

This is based upon an essentially mechanistic medical model; that is, an underlying impairment causes some symptom that requires treatment/cure in order to enable a return to 'normal' (however defined) health. Health psychologists do not dispute the biological basis of health and illness

but have aided in the development of a more holistic model. Health psychologists still have to have an understanding of the various body systems (nervous system, endocrine system, immune system mainly), but also relevant to areas studied in the psychology of health are the respiratory and digestive systems.

#### Behavioural medicine

This is an interdisciplinary field drawing on a range of behavioural sciences, including psychology, sociology and health education, in relation to medical conditions (Schwartz & Weiss, 1977). Behavioural medicine developed in the 1970s at around the same time as health psychology, and it also provided a challenge to the biomedical model dominant at the time. Behavioural medicine examines the development and integration of behavioural and biomedical knowledge and techniques of relevance to health and illness. As its name suggests, it employs behavioural principles (i.e. that behaviour results from learning through classical or **operant conditioning**). This underlying principle is then applied to techniques of prevention and rehabilitation, and not solely to treatment. Behaviour also includes emotions such as fear and anxiety, although behavioural medicine is not concerned with mental health problems on their own. Behavioural medicine furthered the view that the mind had a direct link to the body (e.g. anxiety can raise blood pressure, fear can elevate heart rate), and some of the therapies proposed, such as biofeedback, work on the principle of operant conditioning and feedback.

# operant conditioning

This theory is based on the assumption that behaviour is directly influenced by its consequences (e.g. rewards, punishments, avoidance of negative outcomes).



#### WHAT DO YOU THINK?

Think of some health behaviours you think you might have learned and consider the circumstances under which you learned them. What factors influence your maintenance of these behaviours?

Think of any health problem you have experienced and whether you consider a role for your behaviour in either avoiding that problem in the future or in helping recovery from it.

#### Psychosomatic medicine

This developed in the 1930s and initially was the domain of now well-known psychoanalysts (e.g. Alexander and Freud). As discussed earlier in the chapter, psychosomatic medicine offered an early challenge to biomedicine. 'Psychosomatic' refers to the fact that the mind and body are both involved in illness, and where an organic cause is not easily identified the mind may offer the trigger of a physical response that is detectable and measurable. In other words, mind and body act together, not just the mind. Early work asserted that a certain personality would lead to a certain disease (e.g. Alexander's ulcer-prone personality), and while evidence for direct causality has proved limited, these developments in thinking certainly did set the groundwork for fascinating studies of physiological processes that may link personality type to disease. Until the 1960s, psychosomatic research was predominantly psychoanalytical in nature, focusing on psychoanalytic interpretations of illness, such as asthma, ulcers or migraines being triggered by repressed emotions. However, one limitation to result from this work is that among those adhering to a biomedical viewpoint, illnesses with no identifiable organic cause were often considered as nervous disorders or psychosomatic conditions for which medical treatment was often not forthcoming. Illnesses with no physical evidence are known as psychogenic.

Psychosomatic medicine today is more concerned with mixed psychological, social and biological/physiological explanations of illness, and illnesses addressed are often referred to as 'psychophysiological' (e.g. the *Diagnostic and Statistical Manual of Mental Disorders*: DSM-II), with acceptance that psychological factors can affect any physical condition (DSM-IIIR and DSM-IV).

#### Medical sociology

Medical sociology exemplifies the close relationship between psychology and sociology, with health and illness being considered in terms of social factors that may influence individuals. It takes a wider (macro) approach to the individual in that they are considered within family, kinship and culture. While health psychology also considers external influences on health and illness, it has traditionally focused more on the individual's cognitions/beliefs and responses to the external world and obviously takes a psychological rather than a sociological perspective. The advent of critical health psychology (covered in a following section) may make the boundaries between medical sociology and health psychology more blurred.

#### Clinical psychology

Health psychology and health psychologists are often confused with clinical psychology and clinical psychologists. Clinical psychology is concerned with mental health and the diagnosis and treatment of mental health problems. Clinical psychologists are typically practitioners working within the healthcare setting, delivering assessments, diagnoses and psychological interventions that are derived from behavioural and cognitive principles. Many of these principles inform health psychology research and practice (see the many examples of cognitive behavioural interventions outlined in this text), but the difference fundamentally comes down to the populations with whom we work and the professional status of our discipline. There is, however, overlap between health and clinical psychology, in that some clinical psychologists specialise in the intersection between health psychology and clinical psychology. For example, they can be interested in the treatment of mental health problems (e.g. depression, anxiety) when they arise in the context of people with chronic physical conditions. Different countries differ on this; you can refer to the Australian Psychological Society for more information.

#### Health psychology

Health psychology takes a biopsychosocial approach to health and illness (Engel, 1977, 1980) and thus considers biological, social and psychological factors involved in the aetiology, prevention or treatment of physical illness, as well as in the promotion and maintenance of health. Health psychology is changing as it grows and recently it has been suggested (Marks, 2002, pp. 3–7) that four approaches to health psychology are developing in parallel:

- 1. Clinical health psychology: which merges clinical psychology's focus on assessment and treatment with a broader biopsychosocial approach to illness and healthcare issues and which is generally the domain of clinical psychologist practitioners (e.g. Johnston & Kennedy, 1998).
- 2. Public health psychology: with an emphasis on public health issues—for example, immunisation programs, epidemics, and resultant health education and promotion—this area draws from multidisciplinary sources (e.g. social science, economics, politics).
- 3. *Community health psychology*: which employs the methods of action research and aims to produce healthy groups and healthy communities.
- 4. *Critical health psychology*: which warrants a little more attention here.

#### Critical health psychology

Health psychology has been criticised (e.g. Eiser, 1996; Radley, 1996) for being too individualistic in focus, too concerned with individual aspects at the expense of the social. This book hopes to address some of these concerns by addressing wider influences on health and illness such as culture, lifespan and socioeconomic variables. Humans do not operate in a vacuum but are interacting social beings shaped, modelled and reinforced in their thoughts, behaviour and emotions by people close to them, by less-known people, by politicians, by their culture and even by the era in which they live. Consider, for example, women and work stress—this was not an issue in the 1900s when society neither expected nor particularly supported women to work, whereas in the twenty-first century we have a whole new arena of women's health issues that in part may relate to the way women's roles have shifted in society.

Another criticism aimed at health psychology in the early twenty-first century is that we have focused more on illness than on health (e.g. Marks, Murray, Evans, & Willig, 2000, p. 22); however, in this text we have successfully balanced these and shown how one can influence responses to the

other. Critical health psychologists argue that the biopsychosocial model needs clearer distinction from the biomedical model, particularly in relation to the development of the 'social' component. As Crossley (2000, p. 6) points out, the biopsychosocial model is more often treated in health psychology research as if the three components are simultaneous influences (but still separate) rather than fully integrated ones. The focus on individual thought, feeling and action, she claims, underplays the role played by society and politics in our human experience of health and illness. Contexts and cultures need more attention; for example, a greater acknowledgement of the rich and growing diversity of cultures in the UK and the rest of Europe, as in Australia. Unlike many undergraduate health psychology texts, we aim to provide you with an understanding of cultural influences on health and the responses to illness.

Criticism is inevitable when a discipline has been evolving for only 30 or so years, and it will continue to evolve by attending to these and other voices. Such a critique of one's own discipline is important and beneficial in opening up debates and discussions so that the discipline and those within it do not become complacent. As potential health psychologists of the future, readers should be aware of the importance of reflection and critique. This text aims to respond to its critics by addressing cultural and social perspectives on health and illness in an integrated manner, while at the same time providing coverage of mainstream topics, questions and methods. Central to the argument of critical health psychologists is that *understanding* human health and illness should be the central goal. This text will provide you with that crucial understanding.

## **Summary**

This chapter has introduced key areas of interest to health psychologists, including what health is, how health and illness has been viewed over time, how culture and lifespan influence how health is perceived, and health psychology.

Health appears to consist broadly of domains of 'having', 'doing' and 'being', where health is a reserve, an absence of illness, a state of psychological and physical wellbeing. It is evident in the ability to perform physical acts, such as fitness, and is generally something that is taken for granted until it is challenged by illness.

Views of health and illness have shifted from fairly holistic views, where mind and body interact, to more dualist views, where the mind and body are thought to act independently of one another. This is shifting back towards holism, with the medical model being challenged by a more biopsychosocial approach.

Cultures can be grounded in collective or individualistic orientations, and these will influence explanations for health and illness as well as the behaviour of those within the culture. Children can explain health and illness in complex and multidimensional terms and human expectations of health change over the lifespan as a function of background and experience as well as of cognitive development.

Health psychology is the study of health, illness and healthcare practices (professional and personal). Health psychology aims to understand, explain and ideally predict health and illness behaviour in order that effective interventions can be developed to reduce the physical and emotional costs of risky behaviour and illness. Health psychology offers a holistic but fundamentally psychological approach to issues in health, illness and healthcare.

# Further reading

Kitayama, S. & Cohen, D. (Eds.). (2007). Handbook of cultural psychology. New York, NY: Guilford Press.

As well as containing the Toy and Diener chapter referred to in this chapter, this 30-chapter text has become a leader and a landmark reference for anyone interested in the role culture plays at all levels in terms of perceiving self and others, and in terms of cognition, emotion and motivation, and development. While not focusing on health specifically, it is worth a look.

Turner-Cobb, J. (2014). Child health psychology. London, England: Sage.

This new book goes a significant way towards filling a gap in the market of health psychology textbooks in that it focuses specifically on psychosocial and developmental aspects of child health and illness, including, as pertinent to this chapter, discussion of the health concept.

Those interested in health psychology as applied to public health issues may find this link useful: <a href="https://www.linkedin.com/groups/Health-Psychology-in-Public-Health-5182547">www.linkedin.com/groups/Health-Psychology-in-Public-Health-5182547</a>

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