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ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ УНВІЕРСИТЕТ ІМЕНІ В. Н. КАРАЗІНА

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APPLYING PSYCHOLOGY TO HEALTH

A TEXTBOOK

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Посібник призначений для студентів психологічних факультетів вищих навчальних закладів.

Вправи уроків посібника спрямовані як на розуміння прочитаного, так і на розвиток навичок усного й письмового мовлення. Лексико-граматичні вправи побудовано на матеріалі ряду текстів, які розглядають широкий спектр питань із даної тематики. Їхня мета полягає в засвоєнні й закріпленні лексичних одиниць, які відбивають специфіку матеріалу.

Посібник дозволяє розширити запас знань в області застосування психології в медицині, значно поповнити лексичний запас, набути навичок складання короткого змісту прочитаного, розвинути навички реферування.

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ВСТУП

Даний посібник призначений для студентів психологічних факультетів вищих навчальних закладів, які вивчають англійську мову на етапі навчання, коли студенти вже володіють основами граматики англійської мови і мають достатній запас загальновживаної лексики.

Мета посібника — навчити розуміти спеціальну літературу на базі читання оригінальних неадаптованих текстів, розширити словарний запас студентів, підготувати їх до самостійної роботи з закордонними джерелами; крім того — познайомити студентів із широким колом зв'язків між психологією та здоров'ям, сучасними методами та стратегіями у психології здоров'я, точками зору та науковими підходами сучасних психологів, які працюють у даній області.

Посібник складається з дев'яти тематичних розділів, кожний із яких містить ряд текстів, присвячених одній з проблем по даній темі, а також завдань та вправ на засвоєння і закріплення як нової інформації, так і нової лексики. Важливим елементом посібника є вправи на складання короткого змісту прочитаного, уміння виділити окреме із загального, що дуже важливо для ефективного читання сучасної спеціальної літератури.

Наведені додаткові тексти призначені для самостійної роботи зі словником і можуть бути використані для розвитку навичок реферування.

1. PSYCHOLOGY AND HEALTH

A. PSYCHOLOGY

Psychology is commonly defined as the scientific study of behaviour and experience. The term *scientific* refers to the way that psychology collects its evidence, which is through research, testing and verification. Psychology is concerned with what a person does (behaviour) and what sense he/she makes of the world (experience).
Psychology has been developing as a subject for around 100 years, and the last 30 years have seen a very large growth in research activity and student numbers. The early psychologists such as William James and John Watson had very wide interests and explored a range of human activity. As the subject developed, the various fields within psychology became more specialised and more focused on restricted areas. These areas include:

- cognitive psychology which looks at mental processes such as perception, memory and thinking.
- biological psychology which looks at the relationship between biological changes and psychological responses.
- social cognition which looks at the how we make judgements about people and events.
- developmental psychology which looks at how people grow up and change from the cradle to the grave.
- social psychology which looks at our interactions and relationships.
- individual differences which attempts to categorise and define people in terms of their personal qualities.

A1 Make up questions to the the given answers:

a Study of behaviour and experience.
b To the way that psychology collects its evidence.
c Through research, testing and verification.
d What a person does and what sense he makes of the world.
e For about 100 years.
f Developmental psychology.
g Our interactions and relationships.
h Biological psychology.
i Perception, memory and thinking.

B. WHAT PSYCHOLOGY IS NOT

Psychology is often confused with other academic subjects, practices, and professions.

Psychiatry is a branch of medicine concerned with the nature, causes, diagnosis, treatment, and prevention of mental disorders. A psychiatrist is a medical practitioner who has undergone a conventional medical training before specializing in psychiatry rather than, for instance, gynaecology, general practice, or any other branch of medicine. As a medical specialist, a psychiatrist treats psychiatric patients in hospitals and cases referred by general practitioners.

Psychologists are not medically trained; their entire professional training is devoted to psychology. Furthermore, the work that most psychologists do has little or nothing to do with mental disorders, as psychology is concerned mainly with normal behaviour and mental experience. But the picture is complicated by the existence of a profession called clinical psychology. Clinical psychologists treat mentally disordered patients in psychiatric hospitals and elsewhere, and to that extent their work resembles psychiatry. A patient receiving treatment for a mental disorder may be forgiven for not realizing that Dr T. is a medical practitioner with a diploma in psychological medicine, in other words a psychiatrist, whereas Dr B. is a clinical psychologist who has a doctoral degree in psychology but is not medically trained. The patient may, however, notice certain differences in the psychiatrist's and the psychologist's approach to treatment. A clinical psychologist will not prescribe medical forms of treatment such as drugs, electro-convulsive therapy, shock treatment or psychosurgery.

The interrelationships between psychoanalysis, psychology, and psychiatry are quite confusing.

Psychoanalysts are not necessarily qualified in psychology or psychiatry — their essential training involves undergoing psychoanalysis themselves — but some psychologists and psychiatrists do become psychoanalysts. A further source of confusion is the fact that, especially in continental Europe and parts of the Third World, many psychologists and psychiatrists who are not qualified psychoanalysts are more or less psychoanalytically inclined in their approach. On the other hand, in the United Kingdom, the United States, and other English-speaking countries most psychologists hold views that are distinctly non-psychoanalytic or even hostile to psychoanalysis.

B1 Answer the questions:

a What is psychiatry?
b What is the difference between psychology and psychiatry?
c What does a psychiatrist treat?

d What are the differences in the psychiatrist's and the psychologist's approach to treatment.

e Why are the interrelationships between psychiatry, psychology, and psychoanalysis confusing?

C. PSYCHOLOGY AND HEALTH

Psychology has two special features that it brings to the study of health. The first feature is the breadth of the subject. The brief list above gives a flavour of the broad interests of psychologists. Within the same university department you might find one psychologist strapping magnets to a pigeon's head to see if it can navigate without information about the earth's magnetic fields, and another psychologist exploring the various behaviours associated with opening and closing doors. The study of health requires us to consider a broad range of issues and consider evidence from a wide range of sources.

The second important feature of psychology is its methodology. Psychology has 100 years of experience in trying to record and measure human behaviour and experience, and it has developed a wide range of useful methods that can be applied to health issues. The key areas of The Health of the Nation all require us to discover the following information — what do people do? why do they do it? how do they explain their behaviour? and what would encourage them to change their behaviour? These are the sort of questions that psychologists are concerned with, so it has been a natural progression for them to become more involved in health.

The changing role of psychology in health was brought into sharper focus with the discovery of HIV/AIDS in the early 1980s. This disease poses a challenge for psychologists. Put bluntly, if you never have sex, and you never take intravenous drugs, and you never have blood transfusions, then, provided your mother was not infected when she carried you, you will not get AIDS. Solved that one then! Well, not quite, but the message is clear: you have to do something to get AIDS, and this is where psychologists come in. The disorder is transmitted behaviourally, and once you have the infection there is, as yet, no known cure. So, if we are to slow down the spread of HIV/AIDS, then we must change our behaviour and the behaviour of other people.

AIDS was always going to be different to other diseases. It made us discuss taboo topics like sex and drugs, it made us watch embarrassing television demonstrations of how to put a condom on a carrot, and it made us accept that the only protection from it is to change our behaviour. It also made us realise how little we know about human behaviour, and in particular human sexual behaviour.

C1 Answer the questions:

a What is psychology?
b How old is psychology?
c What did early psychologists explore?
d What is the role of psychology in health?
e What disorders are transmitted behaviorally?
f Why is AIDS different to other diseases?
g What must we do to slow down the spread of HIV/AIDS?

C2 Match the corresponding parts to make up sentences. Translate them into Ukrainian:

1. Developmental psychology...	a. ...looks at our relationship and interactions.
2. Social cognition...	b. ...the way psychology collects evidence.
3. The term scientific refers to...	c. ...studies mental processes.
4. Social psychology...	d. ...looks at how people grow up and change.
5. Psychology is commonly defined as...	e. ...the scientific study of behaviour and experience.
6. Cognitive psychology...	f. ...define people in terms of their personal qualities.
7. Individual differences...	g. ...looks at how we make judgements about events and people.

C3 Complete the following sentences:

a Psychology is commonly defined as...
b Psychology is concerned with...
c Psychology collects its evidence through ...
d Cognitive psychology studies ...
e The discovery of HIV\AIDS has greatly changed ...
f Important features of psychology make psychologists ...
g The only protection from AIDS is...
h If we are to slow down the spread of HIV/AIDS, then...

D. HEALTH PSYCHOLOGY

Fill in the gaps with the appropriate words:

Looks, developed, improve, manage, has, including, point, implement, takes, defined, provides, understand, throw.

Health psychology has _____ as an area of research within psychology. It is very different from the traditional areas because instead of focusing on more and more detailed issues, it takes particular health problems and _____ at the range of psychology that can be applied.
Health psychology is _____ as the educational, scientific, and professional contributions of the discipline of psychology to the promotion and maintenance of health, the prevention and treatment of illness, the identification of etiology and diagnostic correlates of health, illness and related dysfunction, and the improvement of the health care system and health policy formation.
Health psychology _____ a basis for making sense of isolated and confusing bits of data. For example, it is difficult for doctors to _____ why a large proportion of patients fail to adhere to certain aspects of their treatment programmes. Models from social psychology _____ some light on this and suggest ways of responding to it.
Health psychology also provides models that point to new research areas and _____ directly to interventions that can _____ the practice of health behaviour or the adjustment to illness.
Health psychology _____ the position that all stages of health and illness are affected by biological, psychological and social factors — the biopsychosocial model.
Health psychologists design and _____ programmes to help people lose weight, give up smoking, _____ stress, and stay fit. A psychology degree provides an excellent basis for a career in market research, advertising, social work, nursing, personnel management, and various specialized forms of therapy _____ art therapy, music therapy, and psycho-analysis, each of which _____ its own training requirements.

E. THE CONCERNS OF HEALTH PSYCHOLOGY

Answer the following questions before reading the text

a Do people have consistent personalities?
b Can psychologists measure these personalities?

c Do these measurements predict health vulnerability?
d Is there a disease-prone personality type?
e Do psychological states cause illness?

Psychology has a long history of studying the first and second points, and it has created numerous personality tests for every conceivable personal quality.
A major research area has been around Friedman and Rosenman's description of the Type A behaviour syndrome which is characterised by competitive drive, impatience, hostility and rapid speech and motor movements. This was thought to be associated with coronary heart disease, though recent research has found the connection to be weaker than originally thought.
The cognitive factors that psychologists have looked at include the common-sense representations that we make about health, our attributions (explanations for behaviour or events), and our locus of control.
Research suggests that people have general ideas of illness against which they evaluate their particular symptoms and disorders. These common-sense representations of illness include the following dimensions:

- identity (the label of the illness and its symptoms)
- cause ("How did I get it?")
- consequences ("What will happen to me?")
- time frame ("How long will it take to get better?")
- cure ("What will make me better?")

Whenever we feel unwell, we develop some ideas and explanations about what is wrong with us. We want a name for the illness, we want to blame someone for giving it to us, and we want to know what we've got to do to get better. When people are able to match their symptoms to their representations of illness then they are likely to take appropriate illness behaviour, like seeking treatment. If the match is not made, then the person is likely to delay doing anything about it, unlikely to carry out healthy behaviours and to follow the recommendations of health practitioners.

F Rearrange the sentences to form a logical paragraph. Give it a headline:

a Psychologists have been involved in improving our understanding of pain and also developing procedures for pain control that go beyond the simple administration of drugs.
b One of the problems in pain research is measurement, and psychologists have developed a number of measuring instruments.
c Pain is a common and costly health problem.

d Pain is very difficult to define and it is even more difficult to identify how and why we experience it.

e There are a number of theories of pain, the most popular of which is the Gate Control Theory proposed by Melzack and Wall in 1965.

G. HEALTH PROMOTION

Look through the text and think what its main points are:

The key question for health promotion is how we can encourage people to change their behaviour to enhance their health and prevent illness. Health promotion has usually concentrated on trying to change our attitudes, and you are probably familiar with various campaigns about healthy eating and unhealthy smoking. Many of these campaigns are based on the idea that our attitudes (or opinions) are the most important thing in our behaviour. Unfortunately, this is not the case and social psychology discovered that there is a poor relationship between our attitudes and our behaviour, so these campaigns are unlikely to be very successful.

Psychology can help health promotion with its theories of communication and research findings on how to get a message across. It can also help with its theories of behavioural change and decision-making. For example, why does a person with a heart condition continue to smoke despite believing that smoking is seriously damaging their health? The psychological models of change, such as the Health Belief Model offer some suggestions for explaining this puzzle.

One problem in investigating health habits is the low correlation between health behaviours. Just because someone makes healthy choices in one area does not mean that they usually make healthy choices. For example, an athlete may train hard, watch his diet, and may not smoke, but he may drink to excess every weekend. One reason for this inconsistency is that each habit has a complex history of development, and a complex pattern of maintenance, change and relapse. The reason we develop a particular habit, such as smoking, is not the same as the reason for carrying on smoking or the reason for not giving up.

The message for health promotion is that it is not enough to appeal to everyone's common sense. It is necessary to understand why people make the choices they do and how they can be supported in changing them.

G1 Complete the following sentences:

a The key question for health promotion is...
b Health promotion has usually concentrated on...
c Social psychology discovered that...
d Psychology can help health promotion with...
e The low correlation between health behaviours is...
f If someone makes healthy choices in one area...
g The reason we develop a particular habit is...
h It is important to understand why people...
i It is necessary to realize how people...

H. STRESS AND COPING

Read the following sentences and rearrange them to form a logical paragraph:

a Many people adore this activity, but it makes some feel homicidal.
b The early work in psychology looked at the fight-or-flight response to danger, and took a largely biological approach.
c For example, the same event might be exhilarating to one person and stressful to another because of the different ways they interpret what is going on.
d As well as looking at stress itself, psychologists also look at how stress affects the development of other illnesses.
e More recently there has been a growing interest in the psychological judgements we make that affect our experience of stress.
f They have tried to develop ways of reducing stress and ways of enhancing people's ability to cope.
g A classic example of this is shopping in a crowded shopping mall.
h Psychologists look at stress, how we respond to it, how we make sense of it and how we cope with it.

SUMMARY

Prove the following statements:

a Health psychology is a relatively new discipline.
b Health psychology aims to contribute to all aspects of health care.
c Health psychology is most valuable in the areas of preventive medicine and

adjustment to serious illness.

d The biopsychosocial model provides a way of combining the advances of medical science with the insights of psychological theory and practice.

e Having to adjust to a new body image is a feature of many disorders.

f Chronic diseases bring their own array of psychological issues.

g There are some psychological variables that influence the development, experience and treatment of chronic disorders.

supplementary reading

Six sentences have been removed from the text. Choose from the sentences a—f the one which fits each gap 1—6:

a A further problem arises because people are unwilling to disclose aspects of their sexual life.

b The interviews were mainly concerned with who people had sexual contact with, how often they did it and what they did.

c A recent study of sexual behaviour in young people looked at the behaviours that have greatest risk of HIV/AIDS transmission.

d The big problem is that we have very sketchy knowledge about these behaviours.

e What psychologists have to face as scientists, and we have to face as people, is that when we look at human behaviour we will find out things that will make us very uncomfortable.

f The hostile reaction to Kinsey's research led to him being virtually ostracised.

INTERVIEWS AND SEXUAL BEHAVIOUR

The most important risk behaviours in the transmission of HIV/AIDS are sexual behaviour and drug-taking behaviour.

1 _____ The obvious way to get information is to interview people or give them questionnaires, but there are a number of problems in investigating personal issues like these.

The first systematic study of sexual behaviour was conducted by Kinsey (1948, 1953). He used interviews to find out the sexual histories of five thousand men and five thousand women, from a mainly white American population. 2 _____ The publication of the results caused considerable controversy because they did

not fit in with what people expected or what people thought of as acceptable. For example, the study showed that there was a much higher incidence of pre-marital sex, fetishism and homosexuality than society had expected. 3 _____ Yet his only crime was that he had applied systematic methods of sampling and data collection to an area which society deemed to be taboo. So, we have two problems when we want to find out about sexual behaviour. First, we do not have many research findings on it; and secondly, we probably don't want to know the answer anyway. 4 _____ Imagine it from a personal point of view. Would you tell a researcher about the intimate details of your sexual behaviour? Perhaps as a result of Kinsey's experience, the area of sexual behaviour has been much discussed but, until the incidence of AIDS, relatively little researched. The health messages surrounding HIV and AIDS, however, are all about changing sexual behaviour. But if we do not know how people conduct their sexual lives and how they negotiate sex with another person, it is very difficult to design health education programmes to change it.

5 _____ The researchers asked their sample a number of questions including whether they had any experience of heterosexual anal intercourse. Very little is known about this behaviour, probably because it is difficult to ask such a question, since this behaviour breaks a number of taboos and goes against our expectations of romantic love. Breakwell and her associates found that by the age of 19, around 14% of their sample reported the behaviour. If this finding represents behaviour in the general population, then it might account for some of the transmission of HIV/AIDS in heterosexual sex.

6 _____ The threat of HIV/AIDS has made us find out more information about risk behaviours, and has broadened our understanding of human sexual behaviour.

2. STRESS

A1 Before you read the text, try to answer the following questions:

a What is stress?
b Can anyone avoid stress?
c What do you feel when you are confronted with a very stressful situation?
d Why do we have stress?
e What is the feeling of stress?

A. STRESS

Fill in the gaps with the appropriate words:

Likewise, however; well, also, so, as, on the other hand, whereas, for example.

Stress — who needs it? _____ the strange answer is that we probably all do. We seek it out as much as we avoid it. Nearly everyone could have an easier life if they didn't work so hard, play so hard, do so much or think so much. So what is this feeling of stress and why do we have it?
One of the first things to do is to define our terms. _____ ever in psychology, this is not an easy task, but it is helpful to think of the stress experience as being made up of two major components: *stressors* and the *stress response.*
Stressors are stimuli that require a person to make some form of adaptation or adjustment. These stressors usually bring out a relatively stereotyped set of biological and psychological responses — the stress response.
Stressors can be **external**, _____, environmental changes such as heat, crowding, or noise. They can also be social situations such as difficulties with loved one, or contact with a hated one. These are events that happen outside of yourself but have a stressful effect. _____, stressors can be **internal** (inside yourself); for example, pain can create a stress response, as can your thoughts and your feelings.
The relationship between stressors, the stress response and our experience of stress is not straightforward. We might suggest that heat is a stressor that will bring out a stress response so that we feel under stress. _____, those of you who have ever chased the sun on your holidays will know that heat, a beach and a

cool drink are blissfully relaxing. _____ the effect of stressors is affected by the situation we are in and the sense we make of what is happening. The position is further complicated by the fact that some stressors can be viewed as positive, for example, many people seek out big crowds to enhance their sense of excitement. _____, there are large individual differences in our responses to stressors. One person might dissolve into a flood of tears when they miss a train _____ another person might shrug their shoulders and have a beer while they wait for the next one.
All this means that it will not be simple to define and measure stressors. _____, the stress response is quite complex and is made up of numerous physiological, cognitive, affective and behavioural components.

A2 Give examples of...

a external stressors
b social situations
c internal stressors
d positive stressors
e your own responses to stressors

B. AROUSAL

Psychology's early work on stress concentrated on the biological aspects, and in particular, on the process of arousal, the fight or flight response and the general adaptation syndrome.
The concept of arousal is very important to our understanding of stress. It is concerned with the activities of the sympathetic division of the autonomic nervous system, and how they affect our bodies and our experience. The function of the sympathetic division is to stimulate the body into action, and it does this by activating a number of physiological processes. These processes create or maintain alertness and energy by, for example, releasing stored sugar into the bloodstream to fuel muscle activity, increasing the heart rate so that blood reaches the muscles more quickly, and stimulating the release of the hormone adrenaline, which then acts to maintain this level of activity in the body.
States of arousal are often accompanied by highly emotional and highly active states. When we feel very angry, or very frightened, then we are likely to be in a state of bodily arousal. The feelings and the arousal tend to interact with each other, so that the arousal enhances our feelings and our feelings enhance our arousal. A similar state of arousal is also associated with less active emotions such as anxiety and worry, with the level of anxiety linking closely with the level of arousal.

Our level of arousal has an affect on our performance at a variety of tasks. If we are too relaxed (under-aroused) then we do not perform well, and if we are too anxious (over-aroused) then our performance will also suffer. There would seem to be an optimum level of arousal for our behaviour to be successful. This is often referred to as the Yerkes-Dodson Law which simply states that arousal improves performance, but only up to a point. Beyond that point, performance will decline. The optimal level of arousal varies for different tasks, with complex tasks showing an earlier performance decrement than simple tasks for the same level of arousal.

B1 Find the words with the opposite meaning:

internal	unconcern
outside	source
sense	strong
anxiety	question
consequence	decline
exhausted	external
response	absurdity
enhance	inside

B2 Find the definitions to the following words:

Stressors	a strong human feeling
The stress response	are stimuli that require a person to make some form of adaptation or adjustment
Anxiety	a feeling of tension or foreboding
Feeling	excitement
Emotion	to experience a particular physical emotion
Arousal	a relatively stereotyped set of either biological or psychological responses

C. THE FIGHT-OR-FLIGHT RESPONSE

Fill in the gaps with the appropriate words:

Immediate, considerable, anxiety, consequences, initial, subside, prepared, tense, susceptible, stressful.

When we are confronted with a very _____ situation, for example, witnessing a road accident, then we experience an _____ physiological response. We can feel the blood drain from our faces (this is very visible in white people), our stomachs feel as if they have turned over, and our muscles _____. This is sometimes known as the fight-or-flight response, because our body is now _____ for activity — either by fighting to defend ourselves or by running away.
The response develops very quickly but it takes a long time to _____. This means that we are likely to remain in a heightened state of arousal and anxiety for some time after the _____ event. Also, a person might become more _____ to an arousal response following an unpleasant event. For example, after someone has been burgled they may find it too difficult to sleep and find that every noise at night produces a feeling of _____. This means that some people stay in a state of heightened arousal for a _____ time, and this might have some long-term _____.

C1 Match the two parts of the phrases and translate them:

environmental	of tears
quite	difficulties
stressful	of excitement
long-term	the sense
social	under stress
susceptible	life
easier	to an arousal response
feel	consequences
their sense	situations
to enhance	changes
a flood	circumstances
individual	complex

C2 Agree or disagree with the following statements.

a The stress experience is made up of stressors and the stress response.
b The effect of stressors is affected only by the situation we are in.
c The feelings and the arousal do not interact with each other.
d The level of arousal is the same for different tasks.
e Our performance of some tasks always suffers when we are anxious.
f When you are confronted with a very stressful situation you experience a psychological response.
g The fight-or-flight response means that your body is prepared for activity.

C3 Answer the following questions:

a What maintains the level of activity in the body?
b What stimulates the release of the hormone adrenaline?
c What is the function of the sympathetic division?
d What is an optimum level of arousal for our behaviour to be successful?
e What does the Yerkes-Dodson Law state?
f How long does it take a person to get rid of a state of heightened arousal?

D. THE GENERAL ADAPTATION SYNDROME

Read the following sentences and rearrange them to form a logical paragraph:

a They are likely to lose weight and also to "look ill".
b From his early observations in the 1920s, Hans Selye suggested that we have the same bodily reactions to a range of stressful circumstances.
c Originally he thought of this as a "syndrome of just being sick" but later in his research he developed the concept of the General Adaptation Syndrome.
d He observed that when someone suffers from severe loss of blood, or an infectious disease, or from cancer, then they lose their appetite, their muscular strength and their ambition to do anything.
e This suggests that following our initial strong reaction to a threatening event, we are able to adjust to a higher level of arousal in order to resist the threat.
f However, the main weakness of the idea of the general adaptation syndrome is that it does not take any psychological or behavioural variables into account and these are very important in our experience of stress.

g However, there is a limit to how long we can maintain this arousal and eventually our body will take no more and we become exhausted.

h This syndrome suggests that there are three stages that describe the response to long-term stress — the alarm reaction, the stage of resistance, and finally, the stage of exhaustion.

i More recently psychology has taken a very different approach that looks at the interaction between these biological responses and the psychological changes within a person and also the social context in which they are living (the biopsychosocial model).

j This explanation has some appeal because it does seem to describe many people's experience of long-term stress, and it is also supported by some observations of biological changes that take place under stress.

k The early work on stress looked mainly at biological responses in the person and so adopted the medical model.

D1 Find the definitions to the stages that describe the response to long-term stress (resistance; exhaustion; alarm):

a Like the fight-or-flight response, the function of this stage is to mobilise the body's resources. Initially, arousal drops below normal, then it rapidly rises above normal. The body cannot sustain the alarm reaction for long, and if it continues unabated then the organism will die within days or even hours.

b The body adapts to the stressor. Physiological arousal declines but is still above normal. The organism shows few outward signs of stress, but the ability to resist new stressors is impaired and the organism becomes vulnerable to diseases of adaptation such as ulcers and high blood pressure. People also experience feelings of fatigue and general weakness. Long-term psychological effects that have been identified include increased irritability and a tendency towards a pessimistic outlook.

c Eventually the body's energy reserves become depleted and the ability to resist declines. If stress continues, then disease, damage and death can follow.

E. MODELS OF STRESS

Find the corresponding parts to make up sentences:

1 Sarafino defines stress as "the condition that results when the person / environment transaction lead the individual...

2 This definition looks beyond...

3 One of the key features of this approach is to look at...
4 This gap depends on...
5 Lazarus and Folkman suggest that we...

a ...the gap between what we think we have to do to deal with a situation and what we think we are able to do.
b ...how we appraise a situation and how we appraise ourselves.
c ...the biological changes and includes the social and psychological changes as well.
d ...make two cognitive appraisals: first, whether the stressor or event poses a threat (the primary appraisal) and, second, whether we will be able to cope with it (the secondary appraisal).
e ...to perceive a discrepancy — whether real or not — between the demands of a situation and the resources of the person's biological, psychological and social systems".

F. COGNITIVE APPRAISAL

Read the following sentences and rearrange them to form a logical paragraph:

a If we judge that the event is negative, then we make further judgements on three issues: first, how much harm has already occurred ("Oh no, it's already a nightmare!"); second, what is the threat of further harm ("Tomorrow will be a disaster!"); and, third, what sort of challenge does this event offer ("I'll boldly go where no one has gone before!").
b It doesn't necessarily follow on after the primary appraisal and it sometimes might even affect the primary appraisal.
c So, developing a cold one evening might be positive (because you won't have to go to work or college tomorrow), it might be neutral (because you will be able to carry on with whatever you intended to do whether you have a cold or not), or it might be stressful (because you have an examination or interview tomorrow and you think you will not be able to do your best).
d In the primary appraisal we judge whether the event is positive, negative or neutral.
e In the secondary appraisal we have to make judgements about our own abilities and our current state of mind and health.
f For example, if you don't feel able to cope with people today, then a visit to the newsagent for your Daily Mirror could appear quite taxing.
g So if you make the assessment that you are in a poor state of mind (secondary appraisal of coping ability), this might lead you to see a normally safe event as being quite threatening (primary appraisal).

G. PERSONAL QUALITIES AFFECTING APPRAISAL OF STRESS

Four sentences have been removed from the text. Choose from the sentences a—d the one, which fits each gap 1—4.

a When she assessed the hardiness of all the executives she found that the low illness group appeared to be hardier than the high illness group.
b It does not seem to be possible to put people into neat boxes and say "You are a *** type of person", and it is not very useful to try to do this.
c Commitment refers to a person's sense of purpose or involvement in their life.
d Among the personal qualities that psychologists have studied is how hardy we are.

Our appraisal of stress can be affected by our personal qualities, our personal circumstances, and also by the type of event that is causing the stress. 1 _____ Kobasa suggests that we can identify personality characteristics that separate out people who get ill under stress and people who remain healthy.
Hardiness is made up of three components: control, commitment and challenge. Control refers to the belief that a person can influence events in their life. 2 _____ Challenge refers to the tendency to see problems as an opportunity for personal growth.
Support for the connection between hardiness and health came from a study by Kobasa who looked at the health of executives in a large American corporation. She used a questionnaire to divide the executives into two groups, one which had experienced a high level of stress and a high level of illness, and one which had experienced high stress but without much illness. 3 _____
Although relating personal qualities to stress potential is quite appealing there are a number of problems with it. First, the many attempts within psychology to identify personality all run into difficulties because of the complexity and the changing nature of an individual's personality. 4 _____ Second, much of the work on hardiness has been carried out on one narrow group of people — white, professional, American men — and it is not clear whether other groups would show similar results.

H. OTHER FACTORS AFFECTING APPRAISAL OF STRESS

There are a number of factors in our personal circumstances that will affect our appraisal of a stressful event. These include the amount of social support we experience, and the amount of resources we think we have at our disposal.
There are a number of dimensions of a stressful event that are thought to have an influence on how we appraise it, including whether it is negative, controllable or predictable, and whether it is ambiguous. It is generally thought that negative events are more likely to be experienced as stressful than positive events. For example, it is probably more taxing getting married than it is getting a divorce but the latter is more likely to be described as stressful. It is also thought that ambiguous events are experienced as more stressful than clear-cut events. If you are not sure of what is really going on, and therefore unclear about what you can do to affect the situation, then you are likely to experience more stress.
Feelings of control and predictability can relieve the stressful quality of an unpleasant event. An example of this is a study of commuters by Lundberg. Lundberg studied male passengers on a commuter train, comparing their responses during journeys made in crowded and uncrowded trains, and measuring arousal by analysing levels of adrenaline in urine. Despite the fact that even under the most crowded conditions there were seats available for everyone, he found that levels of adrenaline increased as more people rode the train, indicating that people were becoming more aroused.
On the issue of control, Lundberg also discovered that the level of adrenaline was not just to do with the number of people on the train, but was also to do with when the passenger joined it. Those who got on the train at the first stop experienced fewer negative reactions than passengers who joined the train halfway to the city, despite the fact that the early boarders had a longer journey (over an hour compared to just over half an hour). The important issue here seemed to have everything to do with choice of seat: passengers who could choose where they sat experienced less stress than those who could not. So it seems that having some control over their environment made the horrors of commuter travel easier to bear.

H1 Make up questions to the given answers:

a The amount of social support we experience and resources we think we have at our disposal.
b Negative and ambiguous.
c When you are not sure of what is really going on.
d Feelings of control and predictability.

I. POST-TRAUMATIC STRESS DISORDER

Dramatic events sometimes leave people with very unpleasant stress reactions. This has been observed for a long time, though only recently has it been identified as a serious condition and given the label "post-traumatic stress disorder". During the First World War a number of soldiers were discovered away from their positions, disorientated and seemingly confused. Many were treated as deserters and shot by their own military authorities. It is now thought that many were suffering from shell-shock, which is an example of post-traumatic stress disorder.

An example of a disaster that created post-traumatic stress disorder is the sinking of The Herald of Free Enterprise. On 6 March 1987, a "roll-on/roll-off" ferry owned by the British company P&O sailed from Zeebrugge harbour on route for Dover. She left port without securing her bow doors and immediately began to take in water. When she made a hard turn in the harbour, the water in the hold destabilised the ship and it rolled over, with the loss of 188 lives. The events leading up to the sinking are a psychological case study in themselves, but it is the reactions of the other passengers and the relatives of the victims that we are interested in here. These reactions are reviewed by Hodgkinson and Stewart and the points below all come from this source.

Post-traumatic stress disorder was first described in 1980. The description attempts to provide criteria so that it is possible to distinguish between a "normal" reaction to an unpleasant event and an "abnormal" reaction. It is defined as having three main groups of symptoms:

1. Re-experiencing phenomena, for example recurrent and intrusive distressing memories of the traumatic event or situation. It was originally thought that children do not experience intrusive imagery but most of the children involved in the Herald of Free Enterprise disaster reported intrusive thoughts and some experienced full-blown flashbacks.
2. Avoidance or numbing reactions, such as efforts to avoid the thoughts or feelings associated with the trauma, and feeling detached or estranged from other people. Many survivors of the ferry "not only shunned the prospect of ferry travel again but could not even bear to see the sea, and in the immediate aftermath of the disaster could not face taking a bath or shower".
3. Symptoms of increased arousal, such as difficulty in staying asleep, irritability and outbursts of anger.

Post-traumatic stress disorder is cyclical and the symptoms can disappear and reappear. They can also appear some time after the event, even several months or years later, and the delayed versions of the condition are no less severe.

The victims of the *Herald* disaster who were assessed for compensation purposes during the first year after the disaster all showed high levels of distress. "All were found to be suffering from 'recognisable psychological distress', with 53 per cent assessed as moderately to severely depressed, and 90 per cent as suffering

from PTSD". Common wisdom suggests that counselling is a "good thing" in these circumstances, but there is a considerable amount of controversy as to whether therapy for disaster victims offers any benefit. For example, a follow-up study of the survivors and the bereaved from the *Herald* disaster asked for an evaluation of the quality of the social support after the disaster. The people who reported that the support was "mixed" or "unhelpful" fared no worse than the people who reported it as "helpful".

I1 Agree or disagree with the following statements according to the text above.

a Dramatic events always leave people with unpleasant stress reactions.
b Post-traumatic stress disorder was first described in 1987.
c Only recently "post-traumatic stress disorder" has been identified as a serious condition.
d Shell-shock is an example of post-traumatic stress disorder.
e Post-traumatic stress disorder has three groups of symptoms.
f It is impossible to distinguish between a "normal" reaction to an unpleasant event and an "abnormal" reaction.
g Children do not experience intrusive imagery.
h Re-experiencing phenomena are recurrent and intrusive distressing memories of the traumatic event or situation.
i Post-traumatic stress disorder cannot appear some time after the event.

J. MEASURING STRESS

Find the corresponding parts to make up sentences:

1 One of the most important contributions that psychology can make...
2 If we want to investigate stress and develop stress reduction techniques then...
3 If we continue with the division of the stress experience into stressors and the stress response then we...
4 There have been numerous attempts to measure how stressful particular events are...
5 Moos suggested that social environments, like people, ...
6 All environments will have...
7 Moos looked at a number of social climates including psychiatric wards, college dormitories, prisons, work groups, and families, and described...

8 Research has suggested that positive environments will enhance normal development and reduce recovery time from illness, but...

a ...the general characteristics of the environments.
b ...including the following three ways: 1. Measuring the effects of stressors by looking at performance on simple behavioural tasks, or by using self-report scales (asking people to rate how stressful an event was). 2. Stressful life events. 3. Social environment or social climate.
c ...is the development of measuring techniques.
d ...have unique "personalities" — some are supportive and others are more controlling
e ...we need to have some way of measuring how much stress people are experiencing.
f ...responsibility work pressure and change can increase the likelihood of illness or subjective distress.
g ...can look at measures for these in turn.
h ...physiological, psychological and behavioural effects on the people interacting with them.

K. STRESSFUL LIFE EVENTS

The starting point for most discussions on stressful life events is the Social Readjustment Rating Scale developed by Holmes and Rahe (1967). They looked at what events and experiences affect our level of stress, and they developed a scale to measure this. The scale looks at the stress caused by major life events (the sort of events that we experience as difficult to deal with) and is based on previous research which had found that some social events requiring a change in lifestyle were associated with the onset of illness. They developed the scale by asking nearly 400 adults to rate 43 different life events for the amount of adjustment needed to deal with them.

The researchers compared the responses of the different groups of people within their sample and found a startling degree of agreement. They compared the responses of different age groups, men and women, Catholics and Protestants, and in all cases found very high correlations in their ratings of stressful events. The one exception was the correlation of black subjects with white subjects which, although still quite high, was much lower than the other correlations.

To measure your personal stress score with the Social Readjustment Rating Scale, you tick off the events that have occurred to you in a given time, usually 12 or 24 months, and add up the readjustment values. According to Holmes and Rahe, the higher the number you end up with, the more chance you have of developing an illness. A number of studies, by Holmes and Rahe in particular, have shown a connection between high ratings and subsequent illness and accident,

though according to Sarafino the correlation between rating and illness is really quite weak.

K1 Make up questions to the given answers:

a The Social Readjustment Rating Scale.
b Holmes and Rahe.
c In 1967.
d A connection between high ratings and subsequent illness and accident.
e What events and experiences affect our level of stress.
f Some social events requiring a change in lifestyle were associated with the onset of illness.
g By asking adults to rate different life events for the amount of adjustment needed to deal with them.
h The higher the number you end up with, the more chance you have of developing an illness.

K2 Look at the SOCIAL READJUSTMENT RATING SCALE and say what criticisms you can make of it as an attempt to measure stressful life events:

RANK	LIFE EVENT	MEAN VALUE
1	Death of spouse	100
2	Divorce	73
3	Marital separation	65
4	Jail term	63
5	Death of close family member	63
6	Personal injury or illness	53
7	Marriage	50
8	Fired at work	47
9	Marital reconciliation	45
10	Retirement	45
11	Change in health of family member	44
12	Pregnancy	40
13	Sex difficulties	39
14	Gain of new family member	39
15	Business readjustment	39
16	Change in financial state	38
17	Death of close friend	37

18	Change to different line of work	36
19	Change in number of arguments with spouse	35
20	Mortgage over $10,000	31
21	Foreclosure of mortgage or loan	30
22	Change in responsibilities at work	29
23	Son or daughter leaving home	29
24	Trouble with in-laws	29
25	Outstanding personal achievement	28
26	Wife begins or stops work	26
27	Begin or end school	26
28	Change in living conditions	25
29	Revision of personal habits	24
30	Trouble with boss	23
31	Change in work hours or conditions	20
32	Change in residence	20
33	Change in schools	20
34	Change in recreation	19
35	Change in church activities	19
36	Change in social activities	18
37	Mortgage or loan less than $10,000	17
38	Change in sleeping habits	16
39	Change in number of family get-togethers	15
40	Change in eating habits	15
41	Vacation	13
42	Christmas	12
43	Minor violations of the law	11

L. PROBLEMS WITH THE SOCIAL READJUSTMENT RATING SCALE

- Major life events are quite rare and many people will score near to zero.
- Some of the items in the scale are vague or ambiguous.
- Some of the items will have greater value for some groups in society rather than others.
- There are large individual differences in our ability to cope with stressful events.
- There are large cultural and sub-cultural differences in our experience of events.
- The value of events changes with time and changing social customs.

It is worth noting, however, that the measurement of psychological phenomena is a singularly difficult enterprise, and it is usually easier to come up with criticisms of existing attempts than to devise better ways of doing things.

The study of the affect of life events on stress and illness generated a considerable amount of research, not least because the Social Readjustment Rating Scale developed by Holmes and Rahe provides a relatively straightforward way of measuring stress. It also conforms to everyday notions of the effect of dramatic events in our lives. In accounts of personal experience recorded in news reports, it is not unknown for people to say how a particular event, such as unexpected bereavement, or desertion by a loved one, has "shattered my life". Kanner et al. , however, argue that the minor stressors and pleasures of everyday life might have a more significant effect on health than the big, traumatic events assessed by the Holmes and Rahe scale, particularly in view of the cumulative nature of stress.

Kanner et al. (1981) developed a scale to explore these small events, which they called the Hassles and Uplifts Scale. They administered the checklist to 100 middle-aged adults once a month for ten months. The Hassles Scale was found to be a better predictor of psychological problems than life event scores, both at the time and later. Scores on the Uplifts Scale, however, only seemed to relate to symptoms in women. The men in the study seemed relatively unaffected by uplifts.

THE MOST FREQUENTLY EXPRESSED HASSLES OF MIDDLE-AGED ADULTS:

1 Concerns about weight.
2 Health of a family member.
3 Rising prices of common goods.
4 Home maintenance.
5 Too many things to do.
6 Misplacing or losing things.
7 Outside home maintenance.
8 Property, investment or taxes.
9 Crime.
10 Physical appearance.

THE MOST FREQUENTLY EXPRESSED UPLIFTS OF MIDDLE-AGED ADULTS:

1 Relating well to spouse or lover.
2 Relating well with friends.
3 Completing a task.
4 Feeling healthy.
5 Getting enough sleep.
6 Eating out.
7 Meeting your responsibilities.
8 Visiting, phoning or writing to someone.
9 Spending time with the family.
10 Home pleasing to you.

L1 Agree or disagree with the following statements:

a The measurement of psychological phenomena is not difficult.
b The study of the affect of life events on stress generated a considerable amount of research.
c Holmes and Rahe provided a relatively straightforward way of measuring stress.
d The pleasures of everyday life have a more significant effect on health than the big, traumatic events.
e The Hassles Scale was a better predictor of psychological problems.
f The men are unaffected by uplifts.

M. MEASURING THE STRESS RESPONSE

Find the corresponding parts to make up sentences:

1 The attempts to measure various aspects of our responses to stress include...
2 The biochemical research has looked at the effects of stress on various processes...
3 Behavioural observation has included work on specific behaviours such as...
4 It has also included a number of self-report measures on topics as...
5 The cognitive measures have looked at...
6 In health psychology, there have been a number of...
7 An example of this approach is...
8 For example, one of the items is...
9 The general problem with self-report measures such as this is that...
10 The alternative is...
11 One of the best-known measures, in this field is...
12 This schedule looks at a range of issues to do with health, employment, social role, etc., but...

a ...the Perceived Stress Scale (Cohen, Kamarck and Mermelstein, 1983) which asks people to rate 14 items on a five-point scale for frequency of feeling stress during the previous month.
b ...they ask for simple responses from people and so are unable to capture the richness of human experience.
c ..."In the last month, how often did you have to deal with irritating life hassles?"
d ...requires trained interviewers and trained judges to operate it.

e ...to use interviewing techniques and sophisticated coding of people's responses.
f ...stress measures developed to investigate the response to illness, injuries, and medical treatments
g ...the Life Events and Difficulties Schedule (Brown and Harris,1989).
h ...in the body, such as those associated with adrenaline, noradrenaline and also the immune system.
i ...diverse as marital satisfaction and frequency of urination.
j ...the perceived control someone experiences over their life, their perceived level of arousal (often different to the actual level of physiological arousal), mood and attitudes.
k ...biochemical measures, behavioural observation, and cognitive measures.
l ...facial expressions, rate of speech, posture and nail biting.

N. OTHER METHODS OF MEASURING STRESS

Read the following sentences and rearrange them to form a logical paragraph:

a In order to find out the pattern of changes in stress, psychologists have tried a number of techniques, such as diary methods, where people make a number of recordings over a period of time of their feelings of stress, or responses to stress.
b There have been numerous attempts to measure stress, and the items described above just give a flavour of this effort.
c They studied a stratified sample of 100 fire-fighters from 12 different fire stations.
d They found that drivers experienced more stress in the evening and midweek.
e However, the experience of stress is very variable throughout the day, and also from day to day.
f They also found that daily driving stress varied with age and experience, as well as with health condition, sleep quality, and driving conditions, and it was also affected by the driver's overall perception of driving as a stressful activity.
g For example, in 1990 Gulian et al. carried out a study of the pattern of stress in British drivers.
h They are all limited in some way but they all provide some clues to the experience we have of stress.
i One of the problems with many stress measures is that they make just one recording (a snapshot) of the stress level.
j The drivers completed a number of psychometric tests (for example Rot-

ter's Internal-External Locus of Control Scale) and filled in a diary of their feelings while driving over five days.

k Higher scores were found in those under stress due to the number of call-outs, their level of seniority, and the stressful events they recorded in their diaries

l Sometimes psychologists try to combine a variety of methods to obtain a clearer picture of stress.

m The heart rhythm of each fire-fighter was recorded for at least 48 hours while they were at work using a portable electrocardiogram, and the results were analysed to give a "ventricular cardiac strain score".

n They were also asked to keep a diary during this time of stressful events.

o An example of this is a study by Douglas et al., who used a diary method and physiological measures to look at stress in fire-fighters.

SUMMARY

Put one word in each blank space to complete the meaning.

Stress is a part of our everyday _____ but it is difficult for us to accurately define and _____ this quality. It is clear, however, that biological _____ to threatening events, and our personal _____ of stress, have an _____ on our general level of health. Stress is thought to be a factor in a wide range of health _____.

supplementary reading

Look through the text and find the answers to the following questions:

a What jobs are the most stressful? Why?

b What makes the job of the workers at the bottom of the job ladder stressful?

c What stress control strategies do you know?

Recent studies in the area of occupational stress strengthen the assertion that perception plays a vital role in the stress equation These studies also challenge the commonly held notion that executive jobs are the most stressful, due to the decision-making requirements of these jobs. Current findings suggest that while executive positions do entail a relatively high level of stress, this stress is generally of the eustress variety. This is in sharp contrast to the distress experienced by workers at the bottom of the job ladder. These jobs emphasise performance and provide little latitude for decision making or control. Interestingly, it is this perceived lack of control that makes these jobs particularly stressful.

While researchers have made significant strides in their understanding of the mechanisms linking stress to physical ailments, they are less clear on the mechanisms involved when it comes to mental illness. Despite this fact, it is a commonly held assertion that perceived stress has a profound impact on one's mental health. According to a recent government document, the incidence of mental illness among adult Americans is approximately 19 percent and growing. This statistic is based on a broad definition of mental illness that includes some separate categories, such as tobacco dependence, sexual dysfunction, and developmental defects. Reports such as this, coupled with increasing evidence that mental stress is a contributing factor to many health problems, is prompting researchers to develop therapeutic interventions that will protect individuals from the damaging effects of stress, as well as treat those already experiencing some degree of dysfunction. While tranquillisers have been the traditional treatment of choice, a new branch of medicine termed "behavioural medicine" is utilising techniques such as biofeedback, meditation, self-hypnosis, mental imagery, progressive relaxation, exercise, and nutrition counselling to control stress. "Meditation's Magic" examines the process of meditation and lists a number of physical ailments that may be helped by this relaxation technique.

In addition to the aforementioned stress reduction techniques, many stress management programs include time management training, assertiveness training, and goal setting as stress control strategies. While all of these techniques may serve a valuable function in a stress management program, none of them is universally effective. "Out of the Blues" discusses how exercise such as walking can provide therapeutic benefits to those suffering from depression. Walking ranks with the best talk therapies as a mode of treatment for those suffering from depression. This finding provides additional support for a unified mind-body concept by demonstrating that mental disorders can be treated by actions that alter one's physiological state. "Depression: Way beyond the Blues" examines various aspects of depression and suggests things that you can do to help a friend who is depressed.

While significant gains have been made in our understanding of the relationship between body and mind much remains to be learned. What is known suggests, that the mind-set of an individual is the key factor in shaping one's response to

stress. In order to be successful in converting distress into eustress, some people may need to re-evaluate their approach to life so that they feel that they have a sense of direction and purpose.

1 Read the words and give the Ukrainian equivalents:

A branch termed "behavioural medicine", assertiveness training, the key factor in shaping one's response, commonly held notion, reports coupled with increasing evidence, occupational stress, time management training, stress equation, significant stride, the best talk therapies, executive job, decision making requirements, current finding, perceived lack of control, a contributing factor, mind-set of an individual

2 Match the two parts of the phrases and translate them:

1. effective way	**a.** of life
2. understanding	**b.** of prolonged stress
3. essential component	**c.** of health
4. the role of stress	**d.** of new disciplines
5. the discovery of interaction	**e.** to infectious illnesses
6. potential source	**f.** between mind and body
7. the establishment	**g.** to change distress
8. the damaging effects	**h.** f the complex organ
9. increased susceptibility	**i.** in a variety of illnesses

3 Fill in the blanks using the words given below:

Eustress, control, approach, reduction, protect, damaging, assertiveness, mental executive, impact, perception

a _____ plays a vital role in the stress equation.
b _____ jobs are the most stressful due to the decision-making requirements.
c Executive positions entail a relatively high level of _____.
d Perceived stress has a profound _____ on one's mental health.
e Therapeutic interventions _____ individuals from the _____ effects of stress.

f Stress _____ techniques include self-hypnosis, meditation and _____ imagery.
g Stress _____ strategies are time management training, _____ training and goal setting.

h People re-evaluate their _____ to life to feel that they have a sense of direction and purpose.

4 Agree or disagree with the following statements. Correct the wrong ones:

a To be successful in converting distress into eustress you need to evaluate your approach to life.
b Stress reduction techniques may help to control stress.
c Stress is linked to no physical ailments.
d Perception plays a vital role in the stress equation.
e Tranquilizers are universally effective for those suffering from depression.
f Your mind-set is the most important factor in shaping your response to stress.
g The executive jobs are stressful due to the lack of control.
h Workers at the bottom of the job ladder experience the eustress.

5 Answer the questions:

a Are activities such as walking effective in treating mood disorders such as depression? Why?
b What is the mechanism by which they work?
c What is a major component in the stress equation?
d Is there anything one can do to alter one's perception?
e How can positive affirmations and feeling a sense of purpose in your life help to reduce stress?
f What technique is universally effective in a stress management program?
g What is the key factor in shaping one's response to stress?
h Why are researchers developing therapeutic interventions to protect people from effects of stress?
i What techniques does behavioural medicine utilise to control stress?

3. COPING

A. COPING

"I can handle it" we might say when we are confronted with a horrible event. We mean that we have the psychological defenses to protect ourselves from whatever is going on. The concept of psychological protection can be traced back to the work of Freud (1856—1939), who suggested that we have a number of defense mechanisms that protect us from anxiety and relieve tensions. According to Freud these processes deny or distort reality and operate in our unconscious mind. He believed that they were basically unhealthy processes that created emotional problems and self-defeating behaviour.

A1 Some of the major defence mechanisms identified by Freud and his associates are given below. Try to find the definitions to them:

Defence mechanisms

1 Denial
2 Suppression
3 Projection
4 Rationalisation
5 Repression
6 Displacement

Definitions

a is an unconscious process that involves us attributing our own unacceptable behaviours, thoughts or feelings onto others;
b is an unconscious mechanism that keeps thoughts that might provoke anxiety out of our conscious mind;
c is a conscious effort to avoid thinking about stressful things;
d involves escaping from stress by ignoring it or trying to explain it away;
e involves redirecting negative feelings and actions away from source to a safer target;
g involves justifying, making excuses, or taking out a goal in order to limit feelings or responsibility or disappointment.

B. COPING STRATEGIES

There are many ways of coping with stressful situations and some methods are more effective than others. This has led psychologists to try and identify the major coping strategies (the ways that we cope) to look for their relative effectiveness in various stressful situations. Coping strategies are often divided into **two classes: problem-focused strategies** which are directed at changing the situation that is creating the problem; and **emotion-focused strategies**, which are directed at managing the distress rather than changing the situation.

B1 Look through the following coping items and try to classify them as to the focus of coping (problem-focused or emotion-focused) and method of coping (active cognitive, active behavioural and avoidance).

Tried to see positive side
Tried to step back from situation and be more objective
Prayed for guidance and strength
Took things one step at a time
Considered several alternatives for handling the problem
Drew on my past experiences: I was in a similar situation before
Tried to find out more about the situation
Talked with a professional person (e. g. doctor, clergy, etc.)
Took some positive action
Talked with spouse or another relative about the problem
Talked with a friend about the situation
Exercised more
Prepared for the worst
Sometimes took it out on other people when I felt angry or depressed
Tried to reduce the tension by eating more
Tried to reduce the tension by smoking more
Kept my feelings to myself
Got busy with other things in order to keep my mind off the problem
Don't worry about it; figured everything would probably work out fine

C. RESOURCES FOR COPING

There has been a growing interest in the resources that allow us to cope with most of life's stressors. These are summarised in Sheridan and Radmacher (1992) under the following headings:

- **Material resources**, which basically come down to money. Wealth alleviates and helps people to avoid many of the stressors in life. Money buys warmth, food, relaxation, prestige, safety and good health care.
- **Physical resources**, such as strength, health and attractiveness can all help someone cope with stressors.
- **Intra-personal resources** are the inner strengths that help us deal with stressors, for example our self-esteem. In everyday speech we might refer to these qualities as "character" or "determination" or "strength of will".
- **Educational resources** refer to the value of knowledge. If we know about health risks we are able to moderate our behaviour to reduce the risks and cope with the stress.
- **Cultural resources** are the means by which we give meaning to our lives, by being part of a cultural group that has a history and purpose that goes beyond here and now.

D. SOCIAL SUPPORT

Look through the text to answer the questions

a What is social support?
b What kinds of social support are there?
c What is the difference between perceived support and actual support?
d What is the purpose of the Social Network List and the Social Support Questionnaire?
e What disorders do you think is social support of most value in?

Social support is something we all want, and when we are in trouble we often experience the feeling that we do not receive enough of it. But what do we mean by social support? Psychologists have a number of definitions, though they all refer to the social, emotional and other supports which are provided by an individual's social contacts. One way of looking at social support is provided by Cohen and Wills (1985), who describe the following features:

1 **Esteem support**, which refers to the effects of other people promoting your self-esteem (making you feel valued)
2 **Informational support**, which refers to the useful information you may get from your social contacts.
3 **Instrumental support**, which refers to material support, such as money, which you might get from others
4 **Social companionship**, which refers to the support you get from spending time with other people.

A further distinction is made between **perceived support** and **actual support**. The difference between the two is that some people may receive a large amount of instrumental support and esteem support from their friends but think that they are relatively unsupported. It is generally thought that perceived support is a more useful measure for predicting health outcomes or health behaviour than is real support (Johnston, Wright and Weinman, 1995).

The advantage of looking at actual support is that it is relatively easy to assess the information can be gathered from observations, or from records of behaviour such as membership of organisations etc. Even if it is based on self-report then the information is relatively factual and easy to collect. One of the standard ways of measuring the features of social networks is the Social Network List (Stokes, 1983). Using this list it has been possible to show that low levels of social relationships are associated with an increased risk of mortality. An alternative measure is the Social Support Questionnaire (Sarason et al., 1983), which quantifies both the size of social networks and also the perceived qualities of social relationships.

The value of social support has been found in studies on a range of disorders. Breast cancer is one the leading causes of death in women and it might be that social support has an important role to play. Waxier-Morrison et al. (1991) studied 133 women after they received their diagnosis of breast cancer. They looked at their medical records and also obtained information about their social networks using questionnaires. As you might expect, one of the key factors that predicted how long the women survived was how developed the disease was. Social support, however, also had an effect, and longer survival was connected with women who had more friendships and deeper friendships, and with women who worked outside the home.

E. EXPLANATIONS OF SOCIAL SUPPORT

Look through the text to answer the questions:

a What are two approaches to social support?
b What do they suggest?
c What behaviours prevent social support from enhancing health?

There are two basic psychological explanations of the role of social support in health. The main effects model suggests that social relationships enhance health and well-being regardless of stress. The way this might work is through promoting healthy behaviours. Social support is likely to provide models of healthy behaviours, it is likely to reinforce healthy behaviours that the person is carrying out and it is likely to provide encouragement. Although the model can explain

some of the findings, it is clear that not all social support will enhance health. For example, some health-damaging behaviours such as excessive drinking or smoking occur within a social supportive framework.
The other approach to social support is the stress buffering model. This suggests that the health benefits of social support are evident during periods of high stress but are relatively irrelevant during periods of low stress. According to this approach, social support acts as a reserve and a resource that blunts the effects of stress or enables the person to cope more effectively with high levels of stress.

F. SOCIAL SUPPORT AND ILL-HEALTH

Complete the sentences with the following words:

Reinforce, to adapt, provoke, is reinforced, has been shown, has been helpful

Whatever the connection is between social support and health, the importance of social support _____ in a range of disorders, including:

- **Asthma**, where the general finding is that family reactions, particularly those of the parents, can _____ asthmatic symptoms through being over-protective and over-concerned.
- **Coronary heart disease**, where social support _____ in encouraging people _____ their lifestyle.
- **Back pain**, where concerned, supportive family members sometimes _____ pain behaviour by carrying out tasks for the patients whenever they grimace. The patient _____, therefore, _____ for not getting well and the pain may become chronic.

G. TECHNIQUES FOR IMPROVING COPING AND REDUCING STRESS

There have been an amazing number of techniques developed to help people reduce their stress or to help them develop their coping skills. These use a variety of psychological concepts and theories, and although they each seem to have their uses, there is not an easy answer to the stresses and strains of everyday living.

1. BIOFEEDBACK

Complete the sentences according to the text:

a Biofeedback concentrates on...
b Biofeedback aims to...
c The principle behind biofeedback is...
d The causes of headaches are...
e The sort of information that can be given to a person includes

The principle behind biofeedback is that we gain control over bodily functions and actions if we are aware of what is happening. However, with most bodily reactions, such as our blood pressure, we are relatively unaware of what is happening and so are unable to control them. Biofeedback aims to give an individual some direct feedback about bodily responses and so encourage them to take control of that response. Biofeedback concentrates on biological systems that are not under conscious control and that are having an adverse affect on the person.
The sort of information that can be given to a person includes the pattern of their brain activity (using an electroencephalogram), their heart rate, their skin conductance (using a galvanic skin response meter) and their temperature An example of the application of biofeedback in health was developed by Budzynski, Stoyva and Adler (1970) who used the technique with tension headaches. Budzynski et al. gave their patients biofeedback of the muscle tension in their foreheads. They combined this biofeedback with training in deep muscle relaxation, and were able to provide relief for people with a long history of chronic headaches.
This seems to be a simple solution to the problem of headaches but, sadly, nothing is ever that straightforward. The causes of headaches are far from clear, and there are numerous other factors that affect the onset and development of headaches apart from muscle tension.

2. IMAGERY

Fill in the gaps with the appropriate words:

Relaxed, unpleasant, effective, peaceful, simply, particularly, standard, equal, however, significantly, although, helpful

Techniques for training people to use mental imagery have proved _____ in stress reduction. Bridge et al. (1988) described how imagery was used to help to

reduce the _____ emotional consequences of radiotherapy for women who had breast cancer. In the study, women who were undertaking this treatment were allocated to one of three groups. Two of the groups were relaxation training groups, one of which just emphasised physical training, _____ control of muscle tension and breathing, while the other used relaxation training along with mental imagery (asking each person to concentrate on a _____ scene of her own choice). The control group was encouraged to meet and _____ talk about themselves for an _____ amount of time as the two treatment groups.
Bridge et al. assessed the women's moods, using _____ psychometric tests, and found that women in both of the treatment groups were _____ less disturbed than those who were in the control group. _____, it was also clear that those women who had been encouraged to use imagery techniques as well were more _____ than those whose intervention had focused only on physical relaxation. This appears to show the benefits of imagery, _____ it is not at all clear why or how imagery is _____.

3. TREATING POST-TRAUMATIC STRESS DISORDER

Look through the passage to answer the questions:

a What treatments of post-traumatic stress disorder are there?
b What is systematic desensitisation?
c What features has it?

A wide range of psychological interventions have been used on people with post-traumatic stress disorder. These include behavioural treatments, cognitive treatments, psychotherapeutic approaches, group methods, and bereavement counselling and grief therapy. One of the most common treatments for the emotional reactions of post-traumatic stress disorder is systematic desensitisation. This treatment is based on the principles of classical conditioning and generally has the following four features:

1 Training the person in relaxation techniques in which the person learns how to relax their muscles. As the technique is learned, cue words are often associated with the feelings of relaxation so that they can produce similar feelings without the necessity to go all through the relaxation procedures.
2 Exposure to the feared stimulus through imagination during treatment, either in a hierarchical way (imaging the least feared part of the situation and then progressing on to the most feared part) or by flooding (imaging the worst scenario)
3 Going back to the feared situation. For example victims of the Herald of Free

Enterprise disaster were accompanied on ferry trips across the English Channel.

4 Self-directed treatment, where the person starts to carry out their own sessions of desensitisation and flooding, and may expose themselves to real-life fearful situations.

4. RATIONAL EMOTIVE THERAPY

Make up questions to the following answers:

a The way we cognitively appraise the situation.
b Through adjusting the appraisal of the situation.
c Albert Ellis.
d Awfulising and can't-stand-it's.
e It tries to change those thoughts and beliefs which are irrational and negative.

Since the experience of stress is affected by the way we cognitively appraise the situation, it then follows that we can deal with stress through adjusting that appraisal. This is usually referred to as cognitive restructuring. One of the best-known examples of this is **rational emotive therapy (RET)**, which was developed by Albert Ellis. According to Ellis, stress often comes from faulty or irrational ways of thinking, for example:

- awfulising — thinking that it is awful if you get reprimanded at work
- can't-stand-it's — thinking that you can't stand being late for a meeting.

The therapy looks at a person's thought processes and tries to change those thoughts and beliefs which are irrational and negative. The basic plan for RET is the A-B-C-D-E framework.

THE A-B-C-D-E FRAMEWORK
FOR RATIONAL EMOTIVE THERAPY

A is the **activating** experience that creates the stress, for example being told by your partner that you are fat lazy slob who has no friends because you prefer to sit in at night and watch soap operas.

B refers to the thoughts and **beliefs** that go through your mind in response to A. The thoughts might be quite reasonable such as "I should go out more often" or unnecessarily negative such as "I am a fat useless slob and I should get a life".

C refers to the **consequences** of A and B. These might be quite positive like

resolving to be more sociable and less tied to the television, or they might be quite inappropriate like feeling useless and even more socially inept than you really are.

D refers to **disputing** irrational beliefs. This forms part of the therapeutic approach and helps the person to distinguish between "true ideas" such as "I could behave better" and irrational ideas like "I am a total loser".

E refers to the **effect** of the therapy which will hopefully consist of a restructured system of beliefs so that you can sit in and watch a soap opera on Saturday without any guilt or feelings of uselessness.

5. COPING AND PAIN

Complete the sentences with the appropriate words:

Reported, avoiding, help, included, suffering, use, made, looked, found, developed

Easier and Rehfisch (1990) _____ at how coping training could be used to _____ people who were _____ from chronic pain. They _____ a 12-week intervention package, which _____training patients to reinterpret the pain experience, training in physical relaxation techniques, _____ negative and catastrophic thinking, and training in how to_____ distraction at key times. They _____ that compared with untreated patients on a waiting list (the control group), there were significant improvements for these patients at a six month follow-up. The patients _____ fewer general and pain-related symptoms, and a lower level of anxiety and depression. There was also a decline in the number of visits which they _____ to the doctor.

6. STRESS INOCULATION

Look through the passage and find the answers to the following questions:

a What is stress inoculation?
b What was it designed for?
c What are the stages of inoculation programme?
d Where has it been used and what was the effect?

Some medical treatments give people weak versions of a disease in order to encourage the body to develop defences against the full-blown version. This is

called inoculation. A form of cognitive therapy uses a similar idea as a preparation for a stressful event and it is called, not surprisingly, stress inoculation was developed by Meichenbaum (1977) and it is designed to prepare people for stress and to help them develop skills to cope with that stress. The inoculation programme involves three stages:

1 **Conceptualisation**
The trainer talks with the patient about their stress responses, and during this phase the patient learns to identify and express feelings and fears. The patient is also educated in lay terms about stress and its effect.

2 **Skill acquisition and rehearsal**
The patient learns some basic behavioural and cognitive skills that will be useful for coping with stressful situations. For example, they might be taught how to relax and use self-regulatory skill. The patient then practices these new skills under supervision.

3 **Application and follow-through**
The trainer guides the patient through a series of progressively more threatening situations (a bit like the hierarchy in desensitisation). The patient is given a wide range of possible stressors to prepare them for real-life situations.

As with RET, the jury seems to be out on whether this is an effective intervention or not. It has been used in sports with some effect; for example, Zeigler, Klinzing and Williamson's (1982) study of cross-country runners showed that stress inoculation was useful in reducing stress and improving performance at running.

SUMMARY

Complete the sentences with the appropriate verb forms:

To place, are given, become, be given, to negotiate, be encouraged, deal with, drawn, be coped with

There are a range of techniques at our disposal to help people _____ stress and _____ better at coping. However, it must be said that stress is sometimes there for a reason, and it should not necessarily _____. Imagine a stressful work situation where people _____ unrealistic work schedules and are given little or no support. Should they _____ stress counselling or should they _____ to take up trade union activity _____ for a better working environment? Psychologists are unfortunately _____ toward the counselling answer because their focus is more on the individual, and they tend _____ less emphasis on the social and political world in which that individual is living.

supplementary reading

COPING AND BEREAVEMENT

Sometimes, psychological research contradicts our common-sense understandings of how things are. An example of this comes from the work on how we cope with death and bereavement. In Western society, people often try and avoid issues around this inevitable event and rarely discuss their deepest anxieties and fears. Psychological approaches, however, have traditionally encouraged people to break through their inhibitions and cultural conventions which lead us to hide our feelings and to distort our experience. Kubler-Ross (1969) suggested that dying people and their relatives should be more open about the approach of death. Kubler-Ross suggested that if this taboo is broken, it would become possible to see death more positively, as the final stage of personal growth. Kubler-Ross (1969) suggested that there were *five stages of psychological adjustment to death*: 1) **Denial** (it's a mistaken diagnosis); 2) **Anger** (why me?); 3) **Bargaining** (dealing with fate for more time); 4) **Depression** (sadness and crying); 5) **Acceptance**.

This work has been heavily quoted with the unfortunate consequence that it has been seen as the "natural" way to approach death. Although these stages are widely accepted, there is little empirical evidence to support their existence (Wortman and Silver, 1987).

There are also a number of assumptions about the responses we make to loss that have been found to be incorrect. For example, it is commonly believed that a common response to loss is to experience an absence, or drastic reduction, of positive emotions.

Wortman and Silver (1987) investigated the emotional response of parents following the sudden death of an infant (Sudden Infant Death Syndrome, SIDS). They discovered, in fact, that the parents, on average, still experienced as considerable amount of positive emotion. It would seem that the balance of our emotions is different but that we experience happiness alongside the sadness of a tragic loss.

Another commonly held belief about bereavement is that it is important to "work through" grief by talking to people and showing our feelings so that we can achieve an emotional and cognitive resolution. This is based on the idea that unexpressed emotion will have some negative effects on us in the long term. Wortman and Silver (1987) point out that there is also very little evidence to support this idea, and in their study they found evidence for the reverse effect. They found that the parents who had done the most "working through" of their grief showed the greatest distress at the time of loss and also 18 months after the loss.

4. PROMOTING HEALTH AND PREVENTING ILLNESS

A. HEALTH PROMOTION

Read the text and find the answers to the following questions:

a What is health promotion concerned with?
b How is it defined by the World Health Organisation?
c What was the aim of health promotion a 100 years ago and what is it today?
d What are the modern concerns of health promotion?
e What areas does psychology make a special contribution to?

Health promotion is concerned with enhancing good health and preventing illness. It is defined by the World Health Organisation (1984) as "the process of enabling people to increase control over, and to improve, their health".
The role of health promotion has changed over the years. Around 100 years ago the poor health of the British working class led to the introduction of physical education, but the main concern was not the health of the people but the availability of fit young men to join the army. Today the aim of health promotion is to improve a person's quality of life and also to reduce the demands on the limited resources of state health care.
The modern concerns of health promotion are listed by Ewles and Simnett (1992) as:

- health education programmes, which are designed to raise awareness of health risk and encourage changes in behaviour
- primary health education, which aims to prevent ill-health developing in healthy people. It deals with topics such as hygiene, nutrition, social skills etc.
- preventive health services, which refers to services such as family planning, well-person clinics and immunisation
- community-based work, which encourages local communities to identify their own health needs and address them
- organisational development, which refers to the development of practices that promote the health of workers and customers within organisations
- healthy public policies, which encourage policies to promote health in the area of housing, employment, transport etc.

- environmental health measures, which are about making the physical environment better for our health at work and at home
- economic and regulatory activities, which refer to political activity aimed at politicians and planners, and involve lobbying for such changes such as the labelling of food and increases in tobacco taxation.

Psychology makes a contribution to some of the areas mentioned above and in particular, health education and primary health care. Psychology can also make contributions to public policy and environmental health by producing research that identifies the policies and environments that can promote health.

B. HEALTH EDUCATION

Psychology has most to offer in the attempts to change attitudes and change behaviour.
Watson and Lashley made a number of observations that are relevant today, and remarkably do not seem to have been addressed throughout the 70 years since they were made. They observed that:

- using storyline techniques is risky since viewers follow the action rather than the information
- young people respond with flippancy to sex information, and so the best way to present information is in a frank and serious style
- the use of fear-arousing images does not always have the desired effect. For example, their survey found that 89% of the audience believed that venereal diseases are easily transmitted and they should therefore not touch anything that had ever been touched by a prostitute.

The work of Lashley and Watson was a response to the sexual fears of an earlier generation. More recently there has been a lot of concern about sexual behaviour and the spread of HIV/AIDS. Baggaley (1991) reviewed the media campaigns on HIV/AIDS and concluded that they have not taken the lessons first observed by Lashley and Watson. Baggaley concluded that the various mass media campaigns have often used storylines, created a great sense of fear and also used amusing or dramatic styles to get the message across. But if Watson and Lashley are correct then this type of campaign serves only to please the administrators and politicians and has no effect on the health of the population.

B1 Complete the following statements as to the text:

a The best way to present information is...
b Using storyline techniques is risky since...
c More recently there has been a lot of concern about...
d The various mass media campaigns serve only to please...
e The use of fear-arousing images does not always...

C. PREVENTION

Primary prevention refers to the attempts to combat risk factors before an illness has the chance to develop. **Secondary prevention** refers to the actions which are taken to identify and treat an illness or injury early with the aim of stopping or reversing the problem. **Tertiary prevention** involves actions that contain or slow down the damage of serious injury or disease, and, hopefully, rehabilitate the patient. Secondary and tertiary prevention can also involve attempts to improve the quality of life by, for example, reducing pain and increasing mobility.

D. BARRIERS TO PRIMARY PREVENTION

The main effort in primary prevention is to either develop programmes to encourage people to change their health-threatening behaviours, or prevent people from developing health-threatening behaviours in the first place. There are, however a number of barriers to primary prevention including:

- We have only limited knowledge about what behaviours are threatening to our health. For example, it is only in the last 40 years that we have discovered the very harmful effects of tobacco smoking.
- We have a lack of knowledge about how we develop health-threatening behaviours. Some behaviours to do with diet or exercise, for example, develop over many years from our childhood.
- A number of health behaviours are learnt in the home. For example, the children of smokers are more likely to smoke than the children of non-smokers.
- At the time that health-threatening behaviours develop, people often have little immediate incentive to practice health-enhancing behaviours. For example, the effects of smoking are felt in middle to later life rather than when people start smoking.
- People are unrealistically optimistic about their health.

Primary prevention has been largely ignored until very recently, and there are three main reasons for this: firstly the traditional structure of Western medicine; secondly, the difficulty of getting people to practice effective health behaviours; and thirdly, the difficulty in applying methods of attitude and behavioural change to health.

D1 Agree or disagree with the following statements:

a We have discovered the very harmful effects of tobacco smoking long ago.
b We have a lot of knowledge about how we develop health-threatening behaviours.
c We have no knowledge about what behaviours are threatening to our health.
d Primary prevention has been largely ignored until very recently.
e The effects of smoking are felt when people start smoking.
f Some behaviours develop over many years from our childhood.
g People are not quite optimistic about their health.

E. THE TRADITIONAL STRUCTURE OF MEDICINE

Rearrange the sentences to form a logical paragraph:

a So we go to the doctor when we are ill and not when we are well.
b The doctor has a way of diagnosing illness but no way of diagnosing health.
c However, if doctors did apply diagnosis to healthy people then they could identify risk behaviours and so prevent the development of illness.
d This medical approach has historically corrected conditions (made people better) rather than prevented them.
e The biomedical approach underestimates the role of behavioural factors in health.

F. DIFFICULTY OF GETTING PEOPLE TO PRACTICE EFFECTIVE HEALTH BEHAVIOURS

Fill in the gaps with the appropriate words:

Affect, habits, reverted, behave, peer, comfort, attempt, unstable, independent, healthy, response.

There are two main problems with getting people to _____ in healthy ways. First, health habits are _____ (for example, someone might have a very _____ diet but smoke 40 cigarettes a day), and secondly, health behaviours are _____ over time (for example, someone may start the new year by taking regular exercise, but by the summer they may have _____ to being a couch potato). There are many reasons for this independence and instability including:

- Different health _____ are controlled by different factors, for example smoking may be stress-related whereas a lack of exercise may be a _____ to local facilities.
- The factors affecting a health behaviour may change over the history of that behaviour, for example people might start smoking because of _____ pressure, but they continue smoking because of habit and _____, and they relapse into smoking after an _____ to give up because their budgie died.
- The factors that _____ health may change over time, for example, a change of job from something physical to one where you sit in an office all day.

G. DIFFICULTY IN APPLYING THE METHODS OF ATTITUDE AND BEHAVIOURAL CHANGE TO HEALTH

The most effective way of changing attitudes and behaviour is in one-to-one contact. This is the traditional approach of psychological interventions and there are many therapeutic procedures that have good results. The problem is one of resources, and although it is appropriate to have one-to-one therapies for the small number of people who develop serious health problems, it is not practical to have this approach for the whole population. This means that we have to devise methods to reach large numbers of people and change their attitudes and behaviour. Psychology has some research findings that are useful here, but health educators have been slow to react to these findings.
In summary, prevention of illness is the aim of governments and health promotion workers, but there are numerous barriers to prevention not least our traditional way of treating illness rather than encouraging health. It is an important footnote, however, that primary prevention is currently the only way to prevent the spread of AIDS.

G1 Match the verbs with a word or phrase:

to devise	the spread of AIDS
to change	to these findings
to develop	health

to react	attitudes and behaviour
to treat	methods
to encourage	serious health problems
to prevent	illness

supplementary reading

FEAR APPEALS

Discussion of the effects of fear appeals usually starts with the study by Janis and Feshbach (1953). For their study, they prepared three 15-minute illustrated lectures on the dangers of tooth decay and the need for good oral hygiene. The main difference between the three recorded talks was the amount of fear they were designed to create. The strong fear appeal emphasised the painful consequences of tooth decay, diseased gums and other dangers such as cancer and blindness that can result from poor oral hygiene. This appeal also included pictures of diseased mouths. The moderate fear appeal described the same dangers but in a less dramatic way, using less disturbing pictures. The minimal fear appeal talked about decayed teeth and cavities but did not refer to the serious consequences mentioned in the other appeals, and used diagrams and X-ray pictures rather than photographs.

The results showed that the strong fear appeal did its job and created most worry in the students who received the talk. Also, the strong fear appeal talk was rated as more interesting than the other two talks, and the pictures for this talk received a higher rating than the pictures in the other two talks. On the other hand, the strong fear appeal talk also received high negative ratings, with a third of the students saying the pictures were too unpleasant. Overall then, the strong fear appeal produced a strong reaction. However, did it also lead to the biggest change in behaviour? Janis and Feshbach interviewed the students to discover their oral hygiene habits and gave them a "conformity score" to show how much they had changed their behaviour to follow the advice of the talk. The results showed that the minimal fear appeal created the greatest increase in conformity (36%) and the strong fear appeal created the least (8%).

The main conclusion we can draw from this is that people will resist messages with a strong fear appeal. This finding has been supported by subsequent research which shows that fear appeals sometimes lead to:

- no behaviour change
- the avoidance of further health information

- short-term gains only; the behaviour returns to its original pattern when fear subsides.

The attempt to create fear also raises issues of self-efficacy and is currently not regarded as a necessary part of health behaviour programmes. However, this has not stopped its frequent use in health promotion materials.

THE YALE MODEL OF COMMUNICATION

Starting in the 1950s in America a number of psychologists including Carl Hovland investigated the features of a communication that make it persuasive. The work is often summarised as the Yale Model of Communication, named after the university where much of the research was carried out. The important features to consider when preparing a message are the source of the message (or the persuader), the message, the medium that the message is presented in, the target audience and the situation in which they will receive the message. The model attracted a considerable amount of research, though much of it was based on political messages rather than health messages. The general findings from the Yale approach to communication and attitude change were summarised by Zimbardo, Ebbesen and Maslach (1977), who identified the following key suggestions for producing persuasive messages.

1 The source should be credible, and the important features of credibility are expertise and trustworthiness. This means that we are more likely to respond to a message from "a doctor" than we are to a message from "a local drunk". An important point to note is that someone who is a credible source for a middle-aged professional worker might have no credibility for a young production worker.
2 When an audience is generally positive towards the communicator and the message then it is best to present a one-sided argument. On the other hand, if the audience is not sympathetic to the message or the communicator then a two-sided argument is more effective.
3 There will probably be more opinion change in the direction you want if you explicitly state your conclusions than if you let the audience draw their own. The exception to this rule is with a very informed audience, then it is more effective for them to draw their own conclusions.
4 The message should be short, clear and direct.
5 The communication should be colourful and vivid rather than full of technical terms and statistics.
6 The effects of a persuasive communication tend to wear off over time, though attitude change tends to last longer if the person has actively participated in the communication rather than just passively receiving it.

The work on fear appeals and message design is still relevant today. It is clear that we will respond to some messages and not to others. Advertisements are attempts to influence our behaviour, and the effectiveness of some campaigns shows that it is possible to create persuasive message (see the section below on the Lucozade campaign). It is not clear, however, whether the lessons of psychology are applied to health promotion material, and the reason, as Baggaley (1991) suggests, is that the campaigns are designed to please health administrators and politicians rather than to change the health behaviour of people at risk.

5. COMPLIANCE TO HEALTH REQUESTS

A. TRADITIONAL APPROACHES IN SOCIAL PSYCHOLOGY

While reading the text think about the questions the answers on which will make the summary of the text:

Traditional approaches in social psychology to the issues of obedience and compliance suggest that people are very compliant, but the recent evidence shows that our compliance to health requests is very low.

Compliance to health requests means doing as we are told and being sensible about our health. It means taking our medicine, eating the right foods and putting on a warm vest when we go out in winter. This all seems straightforward enough, especially if we look at the early psychological studies on conformity which show how compliant and malleable people can be.

The research on compliance that is popularly quoted was carried out in the 1950s and 1960s with the aim of explaining why seemingly ordinary people carried out hideous acts against human beings during the Second World War. This research gives a picture of people as compliant automatons who readily conform to most social pressures and obey authority without much hesitation. The work of Asch and Milgram is used as evidence to support this pessimistic view. In Asch's study, people would agree with the judgement of a group even when it was transparently correct. In the Milgram study, individuals were required to give electric shocks to another person in an attempt to improve their recall of a word list. About two thirds of the subjects of this study continued to give shocks up to lethal level of 450 volts despite the screams of the victim. (For those of you who are unfamiliar with this study, it is important to point out that nobody was actually given electric shocks.)

These studies give us a clear picture of people as being compliant to social demands, and blindly obedient to requests from authority. In the world of health, however, the problem is very different. People are not compliant and obedient to requests from authority figures, far from it. In fact we are more likely to ignore health requests than we are to follow them.

So why is there this discrepancy between the studies of Asch and Milgram and our observations of health behaviour?

A1 Complete the following sentences according to the text:

a Compliance to health requests means...
b Early psychological studies on conformity show...
c Recent research shows that compliance to health requests is...
d People are more likely to...
e Traditional approaches in social psychology to the issues of compliance suggest...
f The research on compliance was carried out...

B. TYPES OF REQUEST

One of the issues to consider with compliance is the type of behaviour we are asking someone to do. In the social psychology studies the person under investigation was usually isolated from their friends and, in the Asch studies, asked to carry out simple and transparently pointless tasks. In the Milgram study, they were asked to carry out something very unusual in a very unusual situation. The requests for health compliance, on the other hand, are usually made in familiar situations and the behaviour can be discussed with friends and family.
The types of health request fall into a number of categories:

- requests for short-term compliance with simple treatments, for example, "take these tablets twice a day for three weeks"
- requests for positive additions to lifestyle, for example, "eat more vegetables and take more exercise"
- requests to stop certain behaviours, for example, "stop smoking"
- requests for long-term treatment regimes, for example, sticking to a diabetic diet, or the diet prescribed for people undergoing renal dialysis.

A cursory look at these types of request reveals some striking differences, and suggests that the problems of compliance may be different for the different types of medical request. For example, with the short-term request to take my tablets three times a day, I have to make an effort for only a short time and even then it is unlikely to impose any strain on the way I conduct my life. On the other hand, the dietary requirements for patients undergoing renal dialysis are very severe, difficult to follow, and will continue while the patient has dialysis. The diet requires the patient to severely restrict their fluid intake which leaves them feeling thirsty and uncomfortable for much of the time.
When we talk about compliance to health requests, we need to consider what we are asking people to comply with. It is too much of a simplification to regard all health requests as being the same. The reasons why we do not comply with one type of request might be very different to reasons why we do not comply with another.

B1 Make up questions to the given answers:

a The type of behaviour we are asking someone to do.
b Something very unusual in a very unusual situation.
c Simple and transparently pointless tasks.
d With friends and family.
e Requests for positive additions to lifestyle, for long-term treatment regimes and for short-term compliance with simple treatments

C. HOW COMPLIANT ARE PEOPLE TO HEALTH REQUESTS

Fill in the gaps with the appropriate words:

In other words, both, and, still, also, but, whereas, another, if, as.

Developing an accurate picture of treatment compliance can be tricky, and the estimates of patient compliance vary widely from one study to _____. This is partly a matter of definition. Taylor suggested that 93% of patients fail to adhere to some aspect of their treatment regimes, _____ Sarafino argued that people adhere "reasonably closely" to their treatment regimes about 78% of the time for short-term treatments, and about 54% of the time for chronic conditions.
_____, the two researchers were using different definitions. Taylor was talking about precise conformity to every detail of the recommended treatment; Sarafino was allowing for the way that most people "customise" their treatments to fit in with their own lifestyles, _____ recognising that they may _____ be complying with the general features of the treatment.
Sarafino _____ found that the average adherence rates for taking medicine to prevent illness is roughly 60% for _____ long-term _____ short-term regimes, but compliance with a requirement to change one's lifestyle, such _____ stopping smoking or altering one's diet, was generally quite variable and often very low. There are limits, it seems, as to how far people will conform to medical demands _____ they seem to involve too great a change.

D. OVERESTIMATING COMPLIANCE

Read the following sentences and rearrange them to form a logical paragraph:

a The obvious problem is that we can only estimate individuals' compliance if they make themselves available for research even if that just means answering a questionnaire.
b They found that their experimental group improved their compliance from 38% to 88%.
c The first problem is the selection of people to take part in studies.
d The other problem with compliance research is that people will not always tell the truth.
e There are two reasons for thinking that the estimates of compliance might be a bit optimistic.
f For example, a study by Nessman et al. looked at the effectiveness of group sessions in improving compliance in patients with hypertension.
g The problem with this finding is that researchers were only able to persuade 56 people to take part in the study from a possible, number of 500.
h It is most likely that the volunteers were more motivated than the people who declined to take part, and positive result could be explained by their motivation rather than the group sessions.
i One of the reasons for this is to present a good impression to health workers.
j The extreme example is of smokers who have been refused treatment if they admitted that they were still smoking.
k This can be very important, since the patient might well believe that they will only receive the best treatment if the health staff believes that they are carrying out instructions.

E Choose the corresponding subtitles given below to the paragraphs 1—6. Give a headline to the whole text:

Pill and bottle counts; Self-report; Therapeutic outcome; Health worker estimates; Mechanical methods; Biochemical tests

It is important to develop reliable ways of measuring compliance. Cluss and Epstein suggest that the following methods can be used:

1 Ask the patient and they may tell you how compliant they have been. Unfortunately, it is a consistent research finding that patients overestimate their compliance with the treatment programme. Some studies have been able to

compare a patient's report of their compliance of taking medication with some blood or urine samples that record the level of medication in the body. These studies show that patients seriously overestimate their compliance.

2 Is the patient getting better? If, for example, a patient is taking medication for hypertension then we would expect their blood pressure to decrease. However, there are a range of other factors that also affect blood pressure including changes in the environment and the level of stress for the patient.

3 Ask the doctor and they should be able to estimate how compliant a patient is being. Once again, this method has been found to be very unreliable.

4 If we count the number of pills left in the bottle and compare it with the number that ought to be there then we should get a measure of compliance. The drawback to this method is that patients can throw the pills away, and unless we have random, unexpected raids on bathroom cabinet by crack teams of experimental psychologists, we are not much further forward than the method of self-report.

5 A number of devices have been developed to measure how much medicine is dispensed from a bottle. These devices are expensive and they only measure how much medicine goes out of the bottle and not how much goes into the person.

6 It is possible to use blood tests or urine tests to estimate how compliant a patient has been with their medication. For example, it is possible to estimate compliance with diet in renal patients by measuring the levels of potassium and urea in their blood when they report for their next session of dialysis.

Overall, we can use a wide variety of methods to investigate patient compliance, but like all methods in psychology, they only produce estimates of behaviour, and they all contain some degree of error.

F. ATTITUDE AND BEHAVIOUR

Find the corresponding parts to make up the sentences. Translate them:

1 If we are going to examine why people do or do not comply with health requests...

2 The common approach to health promotion is based on the idea that if...

3 This connection between attitudes and behaviour has been investigated by psychologists for the best part of the 20th century with the consistent finding that...

4 So, for example, many people think that it is a good thing to eat sensibly and look after their health...

a people often behave in ways that do not correspond to their attitudes.

b we can change a person's attitudes then we will change their behaviour.
c but still go out on a Friday night and have several pints of beer followed by a high-fat meal.
d we ought to have some idea about how they make decisions about their own health behaviour.

G Choose the corresponding subtitles given below to the paragraphs 1-2 and give a headline to the whole text.

Cost-benefit analysis; The health belief model; Evaluating the threat.

The ways in which we make decisions about our health behaviour are clearly more complex than just responding to our attitudes. One of the attempts to describe how we make these decisions is the health belief model. According to this model, the likelihood that a person will carry out a behaviour that will protect their health depends on two assessments.

1 When we are confronted with a health risk we evaluate our personal threat by considering how serious the condition is (perceived seriousness), and how likely we are to get it (perceived vulnerability). For example, if a person is overweight they might be in danger of developing a heart condition. The person would probably recognise this as a serious condition, but they might believe that because they are still quite young they are unlikely to develop this problem just yet. Therefore they might judge the threat as relatively low. Even if we judge the threat to be serious, we are only likely to act if we have some cue to action. This cue might be a physical symptom like developing chest pains, it might be a mass media campaign, or it might be the death of a colleague with heart disease.

2 The other assessment is a cost-benefit analysis which looks at whether the perceived benefits of changing our behaviour exceed the perceived barriers. The barriers might be financial, situational (difficult to get to a health clinic), or social (don't want to acknowledge getting old). The benefits might be improved health, relief from anxiety, and reducing health risks.

H. APPLYING THE HEALTH BELIEF MODEL

Look through the text to find the answers to the following questions:

a What was the purpose of the health campaigns of the 1980s?
b What components of the health belief model had little effect on the behaviour of the young people?
c What had the greatest effect on their intentions and behaviour?
d At what points has the model limited value and when has it been useful?
e What other models of health behaviour are there?

One of the big health campaigns of the 1980s attempted to encourage people, especially young people, to use condoms in their sexual behaviour reduce the threat of HIV and AIDS. In a study of over 300 sexually active Scottish teenagers, Abraham et al. looked at how the various components of the health belief model related to the intentions and behaviour of the young people. They found that the perceived seriousness of HIV infection, the perceived vulnerability, and the perceived effectiveness of condoms. The factors that had the greatest effect on their intentions and behaviour were the costs of condom use. These costs included beliefs about pleasure reduction, awkwardness of use and the likely response from their partner if they suggested using a condom.

These findings suggest that the early campaigns which emphasised vulnerability and threat had little effect on the behaviour of sexually active people, and that it would be more effective to concentrate campaigns on the barriers to condom use.

The health belief model has attracted a large amount of research and much of it is supportive of the basic theory. However, there is no standard way of measuring the variables in the model such as perceived susceptibility. Also there are a number of health behaviours that do not fit the model, such as habits (e.g. teeth brushing). This means that the model has limited value in predicting whether people will comply with health requests, but it has been useful in trying to understand why people choose the health behaviours that they do.

There are a number of other models of health behaviour, including the theory of reasoned action, protection motivation theory, and subjective expected utility theory. All the theories have some value but none of them provides a comprehensive model of health behaviour.

I. RATIONAL NON-ADHERENCE

One of the most obvious reasons why patients do not comply to health requests is that they do not believe it is in their best interests to do so. This view sees the patient as making a rational decision not to comply. The patient might not believe

that the treatment will help them get better, or they might believe that the treatment will cause more problems than it solves. For example, a study by Bulpitt on the use of treatments for hypertension found that the medication improved the condition by reducing the symptoms of depression and headache, but it also had the side-effects of increased sexual problems such as difficulty with ejaculation and impotence. For some men this would be a price not worth paying. It would therefore be a rational decision to decline to take the medication.

Studies on compliance rarely consider the negative outcomes of the treatment that the patient is being asked to follow, and the costs of compliance are rarely calculated. Various studies, however, have found that treatment programmes often have serious side-effects. For example, Williamson and Chapin suggested that 10% of admissions to a geriatric unit were the result of undesirable drug side-effects. So if we are looking at compliance we should also consider the negative effects of the treatment and the preferences of the patient.

Sarafino summarises the reasons why a rational patient might not adhere to the treatment as follows:

- they have reason to believe that the treatment is not helping
- the side-effects are unpleasant, worrying or reduce their quality of life
- they are confused about when to take the treatment and how much is required
- there are practical barriers to the treatment, such as the cost of the medication
- they may want to check that the illness is still there when the treatment is discontinued.

Therefore, far from being awkward or ignorant, the noncomplying patient is often making the best sense they can of their health problem.

There are a number of other concepts in psychology that can be used to help explain the compliance or noncompliance of patients. These include:

- **Behavioural explanations**
  Learning theories offer a number of possible explanations for noncompliance. These include the role of habits, the power of imitation and the effects of reinforcement.
- **Defence mechanisms**
  The psychoanalytic approach suggests that we protect our ego by a variety of means — for example, avoidance (smokers are known to avoid information about the harmful effects of smoking) and denial ("this isn't really happening"). These issues are often described as coping mechanisms.

Other useful concepts include self-efficacy and locus of control. Locus of control refers to the sense of control a person feels over their situation; whether they

have personal choice or whether they can have little influence on what is happening. The more a person feels in control of their health and their treatment, the more likely they are to comply with the treatment programme. The concept of self-efficacy refers to the belief that a person will be successful in what they are trying to do. People are unlikely to follow a treatment programme if they doubt their ability to carry it out. For example, most smokers know that smoking is harmful and that quitting will improve their health. However, many smokers believe that they are not able to give up, and so do not try.
If we want someone to follow a treatment programme then we need to ensure that the patient believes that they capable of carrying it out.

I1 Match the words in two columns according to the meaning:

Patient compliance	the lower the adherence
Assessing compliance	records of appointment keeping
Predictors of adherence	the doctors' willingness to answer questions
The more complex the regimen	doing what you are told
Personal susceptibility	the belief in the probability of getting disorder
Response-efficacy	confidence in the prescribed regimen to overcome the disease

I2 Match the corresponding definitions with the given words:

Adherence, a doctor, self-efficacy, a predictor of adherence, compliance, methods of assessing compliance.

a The extent to which the patients' behaviour coincides with health advice.
b More mutual relationship between the practitioner and the patient is implied.
c Electronically monitored bottle caps, physical testing, pill counts and records of appointment keeping.
d Doctors' sensitivity to patients' non-verbal expression of face.
e An expert who communicates his \her knowledge to a naive patient.
f The confidence in the ability to perform the behaviour prescribed to reduce the threat.

I3 Agree or disagree with the following statements:

a "Compliance" implies that the practitioner is an authority figure, while the patient is a fairly passive recipient.
b Both patients and practitioners tend to overestimate the patients' compliance.
c Patients with chronic conditions (such as hypertension and diabetes) are more adherent than those with short-term problems.
d Adherence is non-problematic with acute conditions.
e Patients who have undergone liver, renal or heart transplants always comply.
f Compliance is likely to decrease over time.
g Compliance is affected by both practitioner and patient's regimen variables.

I4 Complete the following statements:

a Non-adherence is an important area of research because...
b Patients overestimate their degree of compliance because...
c Despite good adherence prior to the transplant, patients....
d Compliance can be predicted by...
e Compliance is influenced by....
f Health professionals' subjective views may...

J Rearrange the sentences to form a logical paragraph. Give it a headline:

a There are basically two types of diabetes, referred to as Type I and Type II.
b It is a disorder of the systems in the body that are responsible for the storage and use of glucose which is the main energy source that we get from food.
c Diabetes is a life-threatening disorder which can be successfully controlled so that diabetics can lead relatively normal lives.
d Type I diabetes (called insulin-dependent diabetes) involves a complete failure of the pancreas and requires insulin replacement by injection.
e Psychology is very important in the successful treatment of diabetes for a number of reasons:
f Some complications might require rehabilitation and counselling.
g The regulation of glucose in the body is mainly carried out by the hormone insulin which is produced in the pancreas.
h Type II diabetes (or noninsulin-dependent diabetes) is far more common, and in this condition individuals retain some endogenous insulin and are

able to maintain good health through diet, weight management and oral medication.

i Diabetes can affect most areas of life, e.g. schooling and family relationships in children, and mood and interpersonal relationships in adults.

j Management of diabetes requires long-term self-regulation of behaviour, and the necessary behaviour is quite intrusive.

K. THE MANAGEMENT OF TYPE I DIABETES

Fill in the gaps with the appropriate words:

If, so that, therefore, but, unless, then, if, because, on the other hand, for.

Type I diabetics need to follow a number of important guidelines _____ they are to remain in reasonable health. The important thing is to give themselves the appropriate amount of insulin in their regular injections _____ they maintain a steady glucose level in the blood. _____ they let the glucose level go too low then they will have a hypoglycaemic attack ("a hypo") which is life-threatening _____ dealt with quickly. If, _____, the level is too high, _____ the immediate health consequences are slight (provided that a very high level is not maintained for several days) _____ there is likely to be long-term damage and the diabetic is more likely to have circulation problems, vision problems and heart problems. Compliance to the diet and injection regime is _____ important for continued good health.
Diabetics have to respond to the following health requests:

- administer regular injections of insulin at the correct dosage and in a hygienic way
- monitor the level of glucose in the blood with regular testing
- take regular meals and monitor the intake of carbohydrates
- attend regular appointments _____ general health monitoring
- take exercise to maintain a good physical condition
- do not drink much alcohol _____ it lowers the level of blood sugar.

6. HEALTH WORKER AND PATIENT

Answer the following questions:

a Why do we choose to visit the doctor?
b How do people make the decision to seek medical help?
c What happens when we get to the doctor?
d How well do health workers and patients communicate?
e How do health workers decide what help to give?
f How does the doctor make a diagnosis?
g What makes our speech more convincing?
h What is non-verbal behavior?
i What communication is more effective?
j What gesture might make a verbal question unnecessary?
k Do all the types of non-verbal communication interact with each other?

A Rearrange the sentences to form a logical paragraph. Give it a headline:

a We can no more stop communicating than we can stop breathing.
b The interesting thing for psychologists is the different understanding that the sender and the receiver have of the same message.
c We communicate all the time, often without meaning to and sometimes without knowing it.
d Communicating is one of the basic features of being alive.
e If we look at the communication between two people then we can see three elements: the message sender, the message itself and the message receiver.
f Even just standing still and saying nothing communicates something about our attitude and mood.

B. NON-VERBAL COMMUNICATION

One area of communication that has attracted the attention of psychologists is non-verbal behaviour. This is very important in any social interaction and some psychologists suggest that it is four times as powerful and effective as verbal communication. This suggests that if we are with someone who is saying one

thing, but their words do not match their facial expression or body posture, then we are more likely to believe our intuitions about their posture than we are to believe their words. The power of non-verbal communication has been recognised for years and skilled users such as advertisers, politicians and con-artists have been able to make their words appear more convincing through their gestures and mannerisms.
Non-verbal communication is a general term used to describe communication without the use of words. Argyle suggests that non-verbal behaviours have four major uses:

1) to assist speech: they help to regulate conversation by showing when you want to say something, and they emphasise meaning;
2) as replacements for speech: for example, a gesture such as a raised eyebrow might make a verbal question unnecessary;
3) to signal attitudes: for example we might try to look cool and unworried by taking up a relaxed standing position;
4) to signal emotional states: we can usually tell when someone is happy or sad or tense by the way they are sitting or standing.

Non-verbal communication is an important part of the interactions between health workers and patients but it would be untrue to suggest that we can define what all the different gestures mean and give people simple ways to change their behaviour and so change the message. The various magazine articles and books that attempt to say what gestures mean are very misleading because there are variations in non-verbal behaviour in different cultural groups, different age groups and between men and women. Take, for example, what it means if we touch someone. If you touch someone on the arm it might be felt as aggressive, intrusive, supportive, or even romantic. The meaning of the touch will be affected by who is doing the touching and who is being touched.
In the interactions between health workers and patients, non-verbal behaviour will affect how the patients respond to the health messages they are given. Also, as we shall see below, the effectiveness of these messages is affected by the language that is used to describe the illness and the treatment.

B1 Match the corresponding parts to make up the sentences. Translate them into Ukrainian:

1. We are more likely to believe our intuition...	**a.** ...without meaning to.
2. Non-verbal behaviours...	**b.** ...if we speak to someone whose words do not match their facial expression.

3. The meaning of the touch will be affected by...	c. ...to make their words more convincing.
4. Non-verbal communication...	d. ...both who is touched and who touches.
5. Skilled users are able...	e. ...help to regulate the conversation and emphasize the meaning.
6. We often communicate...	f. ...is a general term used to describe communication without the use of words.

B2 Agree or disagree with the following statements:

a Psychologists can define what different gestures mean.
b Non-verbal behaviors assist or replace speech and signal emotional states and attitudes.
c In the interactions between patients and health workers, non-verbal behavior affects how the patients respond to the health message they are given.
d The meaning of the touch is affected by who is being touched.
e Non-verbal behavior is different in different cultures and age groups.
f The sender and the receiver have the same understanding of the same message.

C. IMPROVING COMMUNICATION

The area in which psychology should be most able to provide some help is the communication between doctor and patient-in particular, encouraging health workers to communicate effectively and to be attentive to the needs of their patients. Taylor suggests that this has not been dealt with in the training of doctors for three main reasons. Firstly, there is no general agreement on what the main features of a good consultation are. The same doctor can appear remote and distant to one patient, yet another patient will describe her as 'someone I can talk to'. Secondly, there is a belief within the medical profession that good communication will make the doctor too sensitive and therefore not tough enough to deal with the difficult daily decisions of being a doctor. Thirdly, there is the argument that it is difficult enough for doctors to stay on top of all the medical information they need without complicating their lives with having to be nice to patients. However, as DiMatteo and DiNicola point out, many of the failures in medical communications stem from a lack of basic courtesy. Simple things like addressing people by their name, saying hello and goodbye and telling them where to hang their coat will only add a few moments to a consultation but will appear warm and supportive to the patient.

C1 Complete the following sentences according to the text above:

a Encouraging health workers to communicate effectively...
b Communication between a doctor and a patient...
c The main features of a good consultation are...
d There is a belief within the medical profession that...
e Good communication will make the doctor ...
f It is difficult enough for doctors to stay...
g Failures in medical communications often stem...

D. MAKING JUDGEMENTS AND DECISIONS

Five sentences have been removed from the text. Choose from the sentences a—e the one which fits each gap 1—5:

a This is an example of how the representative heuristic can affect medical judgement.
b As a result of this prominence, we overestimate our chances of getting these diseases.
c It is often discussed under the heading of "human reasoning" but this is misleading because it implies that we think in very logical ways.
d We make judgements about individuals and events based on what we think is typical for that group of people or that class of events.
e People appear to use rules for working out these probabilities and these rules are called heuristics.

Psychologists have carried out a lot of research into the way we make judgements and decisions. 1 _____ The reality is that we have a number of influences on the way we think and make judgements, and it is these influences and biases that are of most use in the study of health decisions.
Every day we make judgements about probabilities. For example, we might decide not to put on a coat when we go out because we don't think it is very likely to rain. 2 _____ One of these rules is the availability heuristic, which involves judging the probability that something will happen, based on the availability or prominence of the information about it. In the area of health, we tend to overestimate our chances of getting a serious disease. Serious diseases come quickly to mind because they are more frightening and also because they form a regular part of television drama. 3 _____ The bias that comes from the availability heuristic might affect our judgements about how risky certain behaviours are, and it might affect the diagnosis decision that health professionals make.

Another heuristic that can have an effect on health decisions is the representative heuristic. 4 _____ For example, if you are a smoker and you develop a medical problem, it is likely that your friends and your doctor will be inclined to see your medical problems as being a result of your smoking. However, even though your smoking will affect some aspects of your health, it will not be responsible for every possible medical condition that you develop. 5 _____

E. LINGUISTIC RELATIVITY

One aspect of communication that affects our approach to health is the language that we use. The Linguistic Relativity Hypothesis (also referred to as the Sapir-Whorf Hypothesis, after the two people who developed the idea) suggests that the structure of our language will affect the way we think. One consequence of this is suggested by Slobin, who points out how often European languages use nouns to describe processes. For example, English might describe the process of flaming using a noun, and referring to "the flame". Slobin argues that this tendency to see processes as objects exerted a powerful effect on Western science, because it led directly to the process of reification — seeing a process as an object. In modern psychology a lot of time has been spent trying to find and describe processes, as if they were really objects — for example, memory. It is clear that we remember things but it is not clear that we have a box in the head that we can call a memory. Most of the evidence suggests that there is not "a memory" in the brain, but that memorising is a process that occurs throughout the brain. Just because we have a word for it, it does not mean to say that it exists.
In the area of health, the Western tendency to describe processes as objects means that diseases are described as things rather than processes. I might describe how "I caught measles" as if they were objects to catch. This leads us towards physical explanations of health and ill-health, and towards medically based treatments. So we are likely to use excessive surgery to remove things and ignore the social and cultural features of ill-health.

E1 Make up questions to the given answers:

a The language.
b The way we think.
c Seeing a process as an object.
d On Western science.
e Memorising.
f Diseases are described as things rather than processes.

F Read the following text. Give it a headline:

It is important in a medical consultation that there should be a good rapport between the health worker and the patient. One of the first things that we notice and make judgements about in any social situation is what people look like, so it is probably important to take account of these first impressions. McKinstry and Wang showed pictures of doctors to patients attending surgeries. The pictures were of the same male or female doctor, dressed either very formally (white coat over suit or skirt) or very informally (jeans and open-necked, short-sleeved shirt, or pink trousers, jumper and gold earrings). The patients were asked to rate how happy they would be to see the doctor in the picture, and how much confidence they would have in the doctor's ability. The traditionally dressed images received higher preference ratings than the casually attired ones, particularly on the part of older and professional-class patients.
Appearance, though, is not the only source of non-verbal communication. Argyle emphasized that all the various types of non-verbal communication interact with each other, so dress alone will not be enough to create a good communication between a doctor and a patient. A formally dressed doctor who avoids eye contact and does not use appropriate facial expressions is likely to come across as aloof or distant, and this in itself is likely to be a barrier to effective patient-doctor interaction for most people.

F1 Agree or disagree with the following statements according to the text:

a Dress will be enough to create a good communication between a doctor and a patient.
b It is important what people look like in a medical consultation.
c A good rapport between a health worker and a patient in a medical consultation is not important.
d Appearance is the only source of non-verbal communication.
e All the types of non-verbal communication interact with each other.
f A formally dressed doctor is aloof or distant.
g A badly dressed patient is unlikely to be a barrier to effective patient-doctor interaction.
h Formally dressed doctors avoid eye contacts and use appropriate facial expressions.

G Fill in the gaps with the appropriate words:

Drug, drawings, prepared, investigated, explanations, condition, available, explain, knowledge.

Health workers often have to _____ medical conditions to people who have very little medical _____. In their _____ they might use visual materials of some sort. Tapper-Jones et al. _____ how general practitioners use visual material during consultations with their patients. They found that the majority of these doctors used free-hand _____ to illustrate points. The only prepared materials that they used came from _____ companies, and very few of the doctors realised that educational materials are _____ from health education units. The introduction of _____ educational material might help the understanding of patients about their _____.

H Rearrange the sentences to form a logical paragraph. Give it a headline:

a Studies on the understandings of patients often show a discrepancy between patient understandings and the current view of the medical profession.

b In a review of this area, Ley found that a substantial proportion of patients are dissatisfied with the information they are given by health workers.

c A major problem in the communication between patient and doctor is the different understandings and expectations they have about health and illness.

d For example, people with peptic ulcers knew that acid caused ulcers but only 10% were able to correctly identify that this acid is secreted by the stomach.

e They showed that about half of the population are unsure where their major organs are.

f Ley attributes much of this dissatisfaction to patients not understanding and forgetting what they are told, and also to their reluctance to ask questions of health workers.

g Other studies have investigated patients' knowledge about the organs of the body.

h Also, many patients with hypertension believed, incorrectly, that they could be cured by short-term treatment .

i If people do not know where things are or what they do, it is easy to see how they can be baffled by medical explanations.

I. GOING TO THE DOCTOR

We do not go to the doctor every time we feel ill. Research suggests that on the vast majority of occasions that we experience a symptom of illness, we do not report it to a health worker. We usually ask other people, most likely our family and friends, for advice before we decide to go to the doctor. These "lay consultations" are very common and Scambler estimates that we make 11 lay consultations for every medical consultation. We receive advice such as, "I went to the doctor with that and she just told me to rest", or more worryingly, "Our Mary had symptoms like that just before she died". So what are the factors that encourage us to go beyond the lay consultations and go to the doctor? Pitts suggests the following key features:

- **persistence of symptoms**: we are likely to take a "wait and see" approach if we get ill and only seek medical advice if the symptoms last longer than we expect;
- **critical incident:** a sudden change in the symptom or the amount of pain can encourage us to seek medical advice;
- **expectation of treatment:** we are only likely to seek medical advice if we think it will do any good. If we have had the same symptoms before and not received any useful treatment then we are unlikely to bother making an appointment.

On the whole, we do not go to the doctor unless we feel it is important because we think we "should not waste their valuable time". This perception means that many people do not seek advice even when they have developed serious symptoms, and if the lay consultations do not encourage them to seek medical advice, their reluctance to go to the doctor can have serious consequences.

I1 Complete the following sentences:

a Every time we feel ill we...
b When we experience a symptom of illness, we...
c Before we decide to go to the doctor we...
d If we have had the same symptoms before...
e Many people do not seek advice even...
f The reluctance to go to the doctor can...
g A sudden change in the symptom can...
h The factors that encourage us to go to the doctor are...

J Read the following text. Give it a headline:

One of the problems for patients in a medical consultation is remembering what they are told by the health worker. We are not very good at remembering detail at the best of times and it is even more difficult when we are trying to remember material that we do not understand or material that is new to us. Ley et al. investigated how accurately people remember medical statements. Patients attending a general practice surgery were given a list of medical statements and were then asked to recall them. The same list was also given to a group of students. The statements were either given in an unstructured way, or were preceded by information about how they would be organised. For example, a structured presentation might involve the researcher saying something like "I'm going to tell you three things: firstly, what is wrong with you; secondly, what tests we will be doing, and thirdly, what is likely to happen to you".
When they were tested to see how much they remembered, Ley et al. found that structuring the information made a very clear difference. The patients who received the information in a clearly categorised form remembered about 25% more than those who received the same information in an unstructured way. The students, who were more used to learning information, were about 50% better if they received categorised information than if it were unstructured. There is clear message in these results for how information can be given to patients so that they will remember it. Since if you cannot remember the instructions then you cannot comply with them.
The study above is about list learning, but what do people remember of real consultations? Ley investigated this by speaking to people after they had visited the doctor. They were asked to say what the doctor had told them to do and this was compared with a record of what had actually been said to them. Ley found that people were quite poor in remembering medical information. In general, patients remembered about 55% of what their doctor had said to them, but the inaccuracies were not random ones. Ley found the following patterns in the errors made by the patients:

- they had good recall of the first thing they were told (the primacy effect)
- they did not improve their recall as a result of repetition — it did not matter how often the doctor repeated the information
- they remembered information which had been categorised (say, which tablets they should be taking) better than information which was more general
- they remembered more than other patients if they already had some medical knowledge.

In a follow-up to the study, Ley prepared a small booklet giving advice to doctors on how to communicate more clearly with their patients. Patients whose doctors

had read the booklet recalled on average 70% of what they had been told, which was a significant increase on the previous figure.

J1 Make up questions to the given answers:

a Remembering what they are told by the health worker.
b Because it is even more difficult when we are trying to remember material that we do not understand.
c About 55%.
d If they have some medical knowledge.
e If you cannot remember them.
f It did not matter how often the doctor repeated the information.

supplementary reading

MIND YOUR MANNERS

Manners have been defined as behaviour, which is calculated to put other people at their ease.
There are also things like whether you clear your plate completely or whether you leave some. And that's quite crucial. In Britain you clear your plate, otherwise it looks as if you didn't enjoy the meal. But in some countries if you clear your plate it means that you haven't had enough, and so your host is duty-bound to keep re-filling your plate until you leave some. So there's a bit of a cultural clash there.
It's not so much manners as a method of communication. A little crumb left in the corner of the plate is a message.
But, well, manners then would be whether you help yourself to something on the table or whether you wait to be served, and whether you serve a fellow guest if you're the host, or not. Whether you share dishes which sometimes happens between friends, but I think would be quite shocking in some situations.
Is there a difference between good manners and etiquette?
Etiquette is more defined. It's a list of rules that have been drawn up, which will appear in a book which people who are insecure will look at and see what they're supposed to do on certain occasions. Whereas good manners, is much more to do with common sense and being considerate to other people. Ideally, the rules of etiquette should be based on the rules of good manners, which is putting your friends and guests at their ease.

But considering other people would probably be best definition of good manners. For example, not interrupting other people when they're speaking or allowing people to express or themselves, say what they want to say in their own words in their own time at their own place.
But how far would you go? If you were with somebody, let's say, who had terrible table manners, would you copy them so as not to make them feel ill at ease?
They may be making the other five guests at the table feel ill at ease and your example of someone who should be allowed to talk on until they've exhausted everything they have to say, because there are another six people who are far more interesting who want to get a word in, it may be not for the greater good of the conversation.

BODY LANGUAGE

Choose the corresponding headlines to the following paragraphs:

Learning the Language; Lies and Body Language; Minding Your Language; Walk Tall; Close Encounters; Safe Space; "Echoes" of Friendship.

1 If body language doesn't match words, it makes us feel uncomfortable even if we can't identify why. Dr Desmond Morris, the world-famous animal and people watcher, calls these incongruities "non-verbal leakage", the failure of our social "mask", and being able to spot them can help us to make much more sense of our interactions. Watching other people's body language can also help your own self-image. "The main problem when people are insecure or lack self-esteem is that they imagine everyone else is secure", he says. "If you spot the tricks someone is using to intimidate you, they seem less threatening." So body language tactics are not to hide these signs of tension but to gain mastery and confidence over the environment, to spot when others are being threatening or belittling, and take counter-measures. "If you don't feel good about yourself, it's going to show. You can only fake it to an extent", says psychologist Dr David Lewis, who teaches people how to use body language tactics to think themselves into a more confident manner.

2 Anyone who's ever tried to change the way they move, say from being round-shouldered, knows that it takes a great deal of concentration — for a while. It can soon become as much of a habit as a slouched posture. And walking tall increases and creates confidence. Another useful ploy to boost confidence before a tricky encounter is to look up at the sky or ceiling (if you're alone, stretch your arms up as well), then put your chin horizontal and lower your gaze, but keep your eyes and eyebrows in the same position. This simple change of facial posture can make you look, and feel, many times more confident.

3 Consider how you feel with true friends. There is a sense of relaxation, of freedom from the tension, power plays and uncertainty experienced during encounters with strangers. The key here is that you are of equal status. Among friends, there is a similarity of posture and a mimicry of movement, known as postural echo. It carries he message “I am like you”, making friends “feel right” together. Popular people seem to have a natural ability with postural echo, and it is often used by successful salespeople. The synchrony is missing in people with serious mental disturbances and many normal people have poor postural echo. Perhaps because their parents were undemonstrative or unloving, they seem never to have absorbed the unconscious signals of co-operative movement. As the echo goes, so does the sense of rapport, and they themselves may find it difficult to make friends.

4 People signal feeling and intent in body language. Jabbing a raised finger in conversation means power or anger. Turning the head, or crossing legs away from someone you’re talking to — however animatedly — shows you don t want to be so involved. Other “barrier signals”, like folded arms, may reveal a person’s hostility or insecurity. Submission gestures like nodding and bowing are ritualised socially. We all start to edge away slightly, or sit forward in our chair, when we’re too polite to say “I’d like to leave”, and most people will take the hint. Those who don’t are likely to be labelled as monopolising bores.

5 A whole new world opens up if you’re aware of contradictory signals. If a friend who seems to be listening raptly is tapping her toes as well, change the subject — she’s bored. No matter how charming the boss is being, those aggressive little foot kicks probably mean you’ll not be given a pay rise. After a lovely evening, the man of your dreams says he’ll call soon, but he isn’t looking at you and his arms are folded — don’t bother to wait by the phone.

6 The way we dominate space is an extension of body language. The more expansive we are, the more powerful, from the hands-behind-head, feet-on-desk pose, to the positioning of towels on a beach or books on a table. Furniture is often used to dominate, like the common ploy of forcing a visitor into a lowly position in the guise of having the most comfortable, squishy armchair. Encroachments into strangers’ territory, like placing your bag firmly on their desk or putting your coffee cup down near to theirs, make them nervous and increase your dominance in an encounter.

7 The first four minutes of any encounter are critical. When two people meeting make eye contact, both raise and lower their eyebrows in a flash greeting, which is known by experts as the “eyebrow flash”. This may signal “hello”, a query, approval, thanks, agreement, flirtation, emphasis or occasionally disapproval. During a conversation, direct gaze is needed for contact and to convey good intent, but it can also be threatening. Intense staring occurs at the heights of both intimacy and aggression. On the other hand, too short a gaze implies disinterest.

LET'S NOT FIGHT ABOUT IT

I was waiting to go on an American chat show a few years ago for a discussion about how men and women communicate, when a man walked in and politely introduced himself. He told me that he had read and liked my latest book and then added, "When I get out there, I'm going to attack you, but don't take it personally. That's why they invited me on this show, so that's what I'm going to do". We went on the set and the show began. I had hardly managed to finish a sentence before the man threw his arms out in gestures of anger and began shrieking — briefly hurling accusations at me, and then railing at length about women in general. The strangest thing about his outburst was how the studio audience reacted. They turned vicious — not attacking me or him, but the other guests who came on after us.

My antagonist was nothing more than a dependable provocateur, brought on to ensure a lively show. The incident has stayed with me, however, not because it was typical of the chat shows I have appeared on — it wasn't, I'm glad to say — but because it exemplifies the ritual nature of much of the opposition that pervades public dialogue.

There is evidence that, in Western culture at least, people prize contentiousness and aggression more than co-operation and conciliation.

It's all part of what I call the argument culture, which rests on the assumption that opposition is the best way to get anything done. The best way to discuss an idea is to set up a debate. The best way to cover news is to find people who express the most extreme of views and present them as 'both sides'. The best way to begin an essay is to attack someone. The best way to show you're really thoughtful is to criticize.

I'm not suggesting that passionate opposition and strong verbal attacks are never appropriate. There are moments in life when true invective may be called for. What I'm questioning is the ubiquity, the knee-jerk nature of approaching almost any issue, problem or public person in an adversarial way. Smashing heads does not open minds. Warlike behaviour and language grow out of, but can also lead to, an ethic of aggression. We come to value aggressive tactics for their own sake and compromise becomes a dirty word. We may start to feel guilty if we are conciliatory rather than confrontational, even if we achieve the result we're seeking. This ethic of aggression, what's more, may lead people to take up positions that are more adversarial than they feel, and this can then get in the way of reaching a possible solution.

I feel that the roots of this ritualized opposition may lie in the education system in certain countries where a standard way to write an academic paper is to position one's work in opposition to someone else's. This creates a need to prove others wrong, which is quite different from reading something with an open mind and discovering that you disagree with it.

And perhaps the most dangerous harvest of this ethic of aggression and ritual fighting is — as with the audience response to the screaming man on the TV

show — an atmosphere of animosity that spreads like a fever. In extreme forms, it rears its head in occasional instances of road rage or shooting sprees. In more common forms, it leads to what is decried everywhere as a lack of civility. In other words, it erodes our sense of human connection to those in public life and to the strangers who cross our paths as we lead our daily lives.

1 Choose the correct answer according to the text:

1 What did the writer find most surprising about the behaviour of the man on the TV show?
a That he had read her book.
b How polite he was beforehand.
c The effect it had on the audience.
d What he accused her of.

2 Why does the writer tell us the story about the TV show?
a She wants to make a point about television.
b It shows how well people react when challenged.
c She wants to illustrate certain trends in behaviour.
d It shows how some situations can be manipulated.

3 According to the writer, people seem to value confrontation more than co-operation because they think it is...
a more effective.
b more objective.
c more exciting.
d more cultured.

4 The writer wants to question people's assumptions about the value of adversarial behaviour because she thinks...
a it may be the result of feelings of guilt.
b it may make people more selfish.
c it may stop people tackling some issues.
d it may not be appropriate to all situations.

5 What does the writer see as the likely long-term consequence of the "ethic of aggression"?
a Falling academic standards.
b A less civilized way of life.
c Regular acts of senseless violence.
d Less discussion of important issues.

2 Answer the following questions:

a Which word in paragraph 2 is used to summarize the behaviour of the "provocateur" on the TV show?
b Which phrase does the writer use in paragraph 3 to tell us that she has reflected on the chat show experience?
c In your own words, summarize the point the writer is making through the examples she gives.
d Why has the writer put the phrase "both sides" in inverted commas?
e What synonym of "strong verbal attacks" does the writer use in paragraph 5?

Summarize Irma Kurtz's attitude towards problems in relationships in a paragraph of 75—100 words. Say whether you agree with it or not.

If there's one thing that really annoys me, it is going to call on people, and you walk in there and there is a television blaring and no one either makes a move to turn the television off or even reduce the level of sound.
The one thing that really annoys me is when you go into a shop and you buy something and the whole transaction is carried out without anybody saying anything, or perhaps you will ask for something and say "Thank you" but the shopkeeper doesn't utter a word. I think that's very bad manners.
One particular aspect of modern life, which appears to me as bad manners, is the habit of giving the telephone priority over a personal conversation. For example, if one is having a business conversation across a desk with someone, if his telephone goes, he will, seven times out of ten, give the telephone call a priority over our conversation, however important our particular conversation happens to be, and will pick up the telephone, quite often without even apologizing — for example saying "Excuse me for a moment".
It's in the public arena, usually where a member of the public is particularly rude to, for example a shop assistant or a bus conductor or a bus driver, when the subject matter of their complaint is totally out of the control of the person to whom they're complaining. And yet they will complain, usually in a rather aggressive, pompous manner to some poor shop assistant who has absolutely no control over the subject matter of the complaint. Or the bus driver. He isn't responsible for the circulation of traffic such that the bus is late, but yet they seem to bear the brunt of those customers' complaints.
As far as I'm concerned, the height of bad manners and lack of awareness is when you're walking down a pavement, perhaps on your own, and you're confronted three or four people right across the pavement who seem to be completely unaware of the fact that in order to pass them you may well have to step right off the kerb.

7. HEALTH AND ORGANISATIONS

A Look through the text to answer how work environment can affect our health:

Psychologists have carried out a number of studies on the work environment to look at how it affects us. One affect of a poor working environment is sick building syndrome, in which our place of work contributes to our ill health. Other factors causing health problems include the population density in the building, and the amount of noise we have to put up with. Much is written about stress at work and psychologists look at factors that are part of the job as well as personal factors such as relationships and burnout.
The stressful aspects of career development can come from a sense of job insecurity, or impending retirement, or job appraisal.
Being part of an organization can threaten a person's sense of freedom. The structure of an organization can either make a person feel as if they belong and can make a positive contribution, or it can increase a sense of personal alienation. The topics of climate and structure are extensively discussed in occupational psychology.

B Read the following sentences and rearrange them to form a logical paragraph. Give it a headline:

a They are employed in business and industry, government agencies, and private practice.
b Some of the problems with which occupational or I/O psychologists deal are vocational guidance and selection, problems of work motivation and job satisfaction, absenteeism and improvement of communication within organizations, design and implementation of training courses, teaching of social and human relations skills, improvement of promotion structures, evaluation of job performance, and problems of safety and welfare.
c Occupational or industrial/organizational (I/O) psychologists are concerned with problems related to people in work and unemployment.
d Some people nowadays call this profession work psychology.
e The three most important branches of occupational or I/O psychology are personnel psychology, ergonomics or human factors psychology, and organizational psychology.

f In general, they are concerned with all aspects of the well being and efficiency of people in work and with psychological aspects of unemployment.

g They also counsel individual employees about career development or retraining following redundancy or retirement.

C Think of one word only which can be used appropriately in the sentences of each paragraph:

1 Ergonomics, called human factors _____ or engineering _____ in the United States, differs from personnel _____ in so far as it is concerned with fitting jobs to people rather than people to jobs.
Ergonomists design jobs, equipment, and work places to maximise performance and well being and to minimise accidents, fatigue, boredom, and energy expenditure. This branch of occupational _____ rests heavily on the findings of basic research in the areas of sensation and perception, cognition, and learning and skills.

2 Ergonomics has yielded important contributions to psychological aspects of equipment _____. During the Second World War, the development of extremely complicated machines controlled by human operators, such as advanced military aircraft, led to research into the _____ of optimal human-machine interfaces.
Early work in this area focused on finding the best ways of arranging controls and instrument panels. This form of "knobs and dials" psychology led to significant improvements in equipment _____. For example, one type of improvement arose from the discovery of population stereotypes regarding the ways in which people (often unconsciously) expect controls to function. Simple examples of population stereotypes are the following. Most people unconsciously expect a knob on an electrical appliance to increase the output when it is turned clockwise and to decrease the output when it is turned anticlockwise. But we expect a water or gas tap to function in exactly the opposite way, decreasing the flow when it is turned clockwise and increasing the flow when it is turned anticlockwise. Controls that do not function in the expected ways cause irritation, inefficiency, and operator errors. Ergonomists have discovered a great deal about how to _____ equipment so as to make work efficient and comfortable. The information technology revolution of the 1980s and 1990s generated intensive research into the optimal _____ of keyboards, programming languages, and visual display units.

3 Ergonomists have also devoted attention to the effects of fatigue, boredom, and noise on human performance.
As industrial processes become more automated, an increasing number of _____ entail passive monitoring of computer screens. The performance of

such _____ requires long periods of continuous alertness and vigilance. Research into these aspects of human performance has led to many important findings that have been applied to the design of such _____.

D Fill in the gaps with the appropriate words:

Of course; Although; mainly (2); although; rather than; among; quite; sometimes; not only; between; important; heavily; other; but also; towards.

Organizational psychology focuses on the structures and functions of organizations and the activities of the people within them. It is applied _____ in industrial organizations, _____ in schools, hospitals, prisons, military units, and _____ non-industrial organizations. It draws _____ on the findings of basic research into learning and skills, motivation and emotion, and individual differences and personality.

One _____ aspect of organizational psychology concerns job satisfaction, employee attitudes and motivation, and their effects on absenteeism, labour turnover, and organizational productivity and efficiency. Evidence from applied research in this area has revealed that job satisfaction depends _____ on five factors: the nature of the work itself, wages and salaries, attitudes _____ supervisors, relations with co-workers, and opportunities for promotion. A scale called the Job Descriptive Index is _____ used by organizational psychologists to measure job satisfaction on these five factors. Job satisfaction depends less than most people realise on the absolute levels of satisfaction and more on the discrepancy _____ employee expectations and experience on the job. When experience in a job fails to live up to expectations, job satisfaction tends to be low, _____ the same work might produce _____ high levels of job satisfaction _____ employees with more realistic expectations. _____, employees form their expectations _____ by comparing their jobs with those of others.

Organizational psychologists believe that it is in the interests of management to ensure that prospective employees are given realistic information about jobs _____ being misled into expecting more than the jobs can offer. _____ low job satisfaction leads to high absenteeism and labour turnover, the relationship between job satisfaction and productivity is not straightforward.

E. THE WORK ENVIRONMENT

Read the text and find the answers the following questions:

a What features of the work environment affect people's health?
b What building is diagnosed as "sick"?
c What is sick building syndrome caused by?
d What increases the susceptibility of workers to illness?
e Why is sick building syndrome controversial?
f What can be done to reduce the problems of sick buildings?

We spend a lot of time in large organisations. As children we spend what seems like a life sentence at school, and as adults many of us work for large organisations. There has been a growing concern about how organisations can affect our health, and how they could be used to promote our health.
Offices can seriously damage your health. Buildings can be diagnosed as "sick" when staff complains of illness more commonly than you would reasonably expect. The most common symptoms are:

- lethargy and tiredness
- dry throat
- runny nose or blocked nose
- difficulty in breathing
- tight feelings in the chest
- dry, itchy or watery eyes
- headaches
- coughs
- nausea
- mental fatigue.

The most likely causes of these symptoms are poor air conditioning, low humidity and a high level of dust in the air. Other features such as poor temperature control can add to the generally poor environment of office space.
A number of things that can be done to reduce the problems of sick buildings include ensuring good air flow and appropriate humidity, reducing static electricity in carpets, dampening noise, and maintaining an ambient temperature. Workers should be allowed to adjust the light level by the use of dimmers or table lamps. This suggests that control of the environment might be an important factor in individual health. Sick building syndrome is still quite controversial despite the increasing number of reports of the problem. The controversy surrounds whether the syndrome is due to the environment of the building, or whether it is due to some psychological factors. For example, Czander suggested

that sick building syndrome is caused by the social dynamics of the workplace that increase the susceptibility of the workers to illness. On the other hand, Bauer et al. carried out a range of psychological measures on workers in sick buildings and found very few differences between workers with symptoms of the disorder and workers without the symptoms. This suggests that the illness comes from the building rather from psychologically vulnerable people.

E1 Complete the following sentence according to the text:

a Children spend a lot of time at...
b Organisations can affect...
c Offices can damage...
d A building can be diagnosed as "sick" when ...
e When staff complains of illness...
f The most common symptoms of a sick building are...
g The most likely causes of these symptoms are...
h To reduce the problems of sick buildings...
i The syndrome is due to...

F Read the following sentences and rearrange them to form a logical paragraph. Give it a headline:

a Some workers are more at risk of sick building syndrome than others.
b At one building of the financial services company Sun Alliance, natural daylight has become a status symbol, according to Pilkington.
c One social factor that appears to affect illness within a building is status.
d In contrast, the mainly female clerical staff is corralled in large open-plan rooms with no natural light or ventilation.
e The managers have their rooms on the outside edge of the building on the top floor where they can control their environment by opening windows.
f The workers at risk include the low-paid, low-status workers doing sedentary repetitive jobs, clerical staff, public sector workers, people with allergies, and women rather than men.
g The problem with this company is not their building but the way they treat their staff.
h So far, no one has suggested that illness at work could be due to "sick management syndrome", though this might be a reasonable explanation of the evidence.
i This list further supports the idea that the effects of the sick building are

made worse by other factors such as status, personal control and management style.

G. POPULATION DENSITY

Another feature of the work environment that can affect us is the number of people that we have to work with in a limited space. Being in a crowd does not always make us feel bad. In fact we often prefer to be a crowd for some social events such as live music or sports events. The basic physiological effect of crowding is to increase our level of arousal (increased blood pressure and heart rate). Although this is pleasant at leisure events, it becomes increasingly uncomfortable in other circumstances.

It is difficult to measure these effects at work because of the problems in assessing the level of crowding and the level of arousal. The work on population density that is most commonly quoted is a study on the effects of changes in jail population densities on crowding. Wener and Keys looked at the amount of sickness amongst the prisoners. The researchers collected data before and after a court order that led to a reduction in the population levels in one unit, which was already overcrowded, and an increase in another prison unit. Eventually the final population density in both units became the same. Wener and Keys found that when the population levels were equal in the two units, the perceived crowding and sickness rate was higher in the unit, which had become more full than in the unit which had its population reduced. This shows how you cannot measure crowding by just counting the number of people in the space. You also have to consider how the people perceive the level of crowding.

More dramatically, a study by Paulus, McCain and Cox showed that prisoners living in settings with greater space and less social density had less sickness than prisoners in high-density settings. In fact, population density has been found to be closely related to the death rate in prison.

G1 Match the words in two columns according to the meaning. Translate them:

1. cognitive	**a.** noise
2. sedentary	**b.** into account
3. clerical	**c.** susceptibility
4. reasonable	**d.** temperature
5. psychologically	**e.** jobs
6. ambient	**f.** vulnerable
7. increase	**g.** staff

8. take	h. explanation
9. exposure	i. impairment
10. dampening	j. to health risks

G2 Agree or disagree with the following statements:

a The work place can't damage our health.
b Illness could be due to management style.
c Being in a crowd makes us feel bad.
d The number of people we work with affect us greatly.
e Status is considered to be one of the factors that affect our health.
f The physiological effect of crowding is to increase our level of arousal.
g Population density is closely related to the death rate.

H. BEHAVIOUR IN CROWDS

Make up questions to the text and answer them:

It's natural that people typically change behaviour in a crowd. One very simple example is that you very rarely laugh by yourself but when you're in a crowd of people, say at some funny film, play or whatever it's very common to find yourself laughing out loud.
People have needs to be with people for various reasons — family, friends, activities — and they also get things out of simply being in a larger crowd. Sometimes it's just a sense of being, somewhat more anonymous. They sometimes also get an amplification of feelings. For example at concerts, in football crowds, feelings seem to get heightened and sometimes there's something really nice about getting a strong sense of being part of a large group. Crowds very often seem to amplify feelings and so they can amplify bad as well as good feelings. We have a number of kinds of identities. One, which is the predominant one, is our everyday one. But there are others and what happens in crowds is that we can sometimes shift our identity. And what a crowd picks up on are other aspects of us, which might sometimes be the less pleasant ones, the more destructive ones.
The same things happen in some animal kingdom. The examples are coordinated groups, like small fish schooling so that they look like a large fish to possible predators and lions hunting in packs and large groups of animals like ants and bees and so on who act in a very highly structured way. It is much less typical of humans except in odd circumstances like armies. But they sometimes also have disruptive tendency -packs of animals scattering in panic too.

So this feeling of amplification when we're in a crowd can lead us to act in an uncharacteristic way. Uncharacteristic in the sense that it's what we don't normally do but it's not, as it were, not ours. The behaviour is there usually kept under control.
The group situation, rather than the crowd, is very different. In a group you're focused in, you're looking inwards, you're not worried about people outside. What's very clear is there's a very strong sense of being a member of a group, of a very defined little set, it's us versus animals.
It gives you a sense of security presumably. It's familiar, it's comfortable and it also reinforces your sense of yourself because you're very aware of yourself as a member of that group, as being a person among friends. And that also helps you relax in various ways, you're comfortable about your behaviour, you're defined as a friend among friends and therefore you don't have to worry about how you appear so much.
That's true that your behaviour still change slightly in a crowd, surely a small group will change you in some way sometimes.
We have a number of identities and our identity varies depending on the kind of group we're in. In a particular group we have a particular kind of identity with certain behaviour, so that when you're with a group of friends you relax, laugh, play the fool, but there are other groups you're members of where you behave differently, groups of workmates for example, more formal groups. And so in a sense you have different roles depending on what group you happen to be in at a given time. Most of us are aware that this happens, that we are different kinds of people in different kinds of situations.

H1 Indicate which views are expressed in the text:

a People usually only laugh if others are doing so.
b People hide their real feelings in a crowd.
c Being in a crowd encourages us to behave badly.
d Being in a crowd can make us unhappy.
e Animals only form groups for a specific purpose.
f Groups of ants and bees have little in common with groups of humans.
g Our behaviour in crowds is no indication of our real personalities.
h People often feel restricted when they are members of a group.
i People are more careful about their behaviour when they are with friends.
j We change behaviour in groups in the same way as in crowds.
k Most people do not realize that their behaviour changes according to who they are with.

H2 Answer the following questions:

a Does a crowd affect an individual behaviour?
b Is it natural for our behaviour to change when we are in a crowd environment?
c Does your behaviour change in a crowd?
d What sorts of behaviour do you find in a crowd environment?
e Why should we become disruptive in some sorts of crowd environments?
f Why should there sometimes be the element of aggression?
g Is the group situation different from the crowd?
h Does a small group change you in some way?
i Does the same thing happen in the animal kingdom?

I. NOISE

One of the stressors at work that has an effect on our health is noise. For example, a study by Cohen et al looked at children from four schools, which were under a flight path near Los Angeles airport. The children in these schools experienced frequent episodes of uncontrollable, unpredictable and very loud noise. They were compared with children from three matched schools in quiet areas, using physiological and behavioural measures of stress. The researchers found that the children from noisy areas showed some cognitive impairment in that they were more likely to give up on a puzzle-solving task. They also had significantly higher blood pressure.

Studies of industrial workers show that high levels of noise are associated with cardiovascular disorders, sore throats and digestive disorders. It also appears that noise interacts with other stress-related behaviours to enhance the dangers of ill health. For example, smokers tend to increase their rate of smoking in noisy conditions. In a study by Cherek, smokers were subjected to 90 decibels of taped industrial noise (the sound of pneumatic drills about 20 metres away). When they were in the noisy conditions they increased their number of cigarettes by about 15% and increased the number of inhalations by about 30%.

Noise also has an affect on mental health, and various studies have found that industrial noise is associated with headaches, nausea, instability, argumentativeness, mood changes and sexual impotence. However, it is difficult to make a direct link between noise and ill health since there are always many other variables to take into account. For example, workers with the worst noise conditions at work are often the workers with the lowest status and the least pay. They may also have more exposure to other health risks such as toxic materials or poor housing conditions, so their poor health may be due to their poor general environment rather than to the specific problem of noise.

I1 Agree or disagree with the following statements:

a It is impossible to make a direct link between ill health and noise.
b Noise has an effect on mental health.
c Poor health is due to the poor general environment rather than to the specific problem of noise.
d Industrial noise is not associated with instability and mood changes.
e Any child from a noisy area has normal blood pressure.
f Noise does not interact with stress-related behaviours.
g The children from quiet areas have some cognitive impairment.
h Smokers tend to decrease their rate of smoking in noisy conditions.

J. STRESS AT WORK

Look through the text and think what its main points are:

Stress at work is being taken increasingly seriously by employers for three reasons.

1 Stress is believed to be one of the major causes of absenteeism at work, and the cost to employers is substantial.
2 Stress is also believed to be the cause of increased staff turnover, which also is costly for employers.
3 There is growing fear of litigation for employers if they can be held responsible for the stress of their employees.

Cooper and Eaker identify **five major categories of work stress**:

- factors that are part of the job
- the role of the individual in the organization
- relationships at work
- the opportunities for career development
- organizational structure and climate.

One of the factors affecting stress at work is the shift pattern that a worker is required to follow. It is a consistent research finding that changing shifts patterns are disruptive to physical and psychological well being.
There is a growing trend in British hospitals for nurses to be asked to work rotating shifts. This means that they have to work some morning shifts, some afternoon shifts and some night shifts in every month. This is despite the evidence

that shift rotation has an adverse effect on the physical and mental well being of nurses. A study by Tasto, Colligan, Skjei and Polly found that nurses on shift rotation showed increased levels of alcohol use, more health problems, less satisfaction in their personal life, more depression and more anxiety than nurses on fixed shifts. These findings make the forced introduction of shift rotation all the more remarkable, though it is usually enforced by administrators who work fixed day shifts.
Working conditions also affect work stress. Factors such as noise, temperature, pollution or social isolation can all create stress. Health workers often work in very stressful environments. The lighting in hospitals is often bright, the wards are often very noisy and the ventilation systems often inadequate.
Other factors of the job associated with stress include:

a excessively long hours at work required (e.g. junior hospital doctors in Britain);
b the level of risk and danger;
c the introduction of new technology;
d work overload;
e work underload.

K Rearrange the sentences to form a logical paragraph. Give it a headline:

a Role conflict, on the other hand, might involve conflicting demands from different groups of colleagues.
b For example, middle managers are often caught between the needs of their staff for better working conditions and the demands of their senior managers for greater output.
c This can lead to low job satisfaction, physiological strain, lowered self-confidence, greater depression, lowered motivation and a greater intention to leave the job.
d Role ambiguity develops when workers are unclear about what they should be doing and what is expected of them.
e The sources of role stress at work can be roughly divided into two categories: stress due to role ambiguity and stress due to role conflict.
f Role conflict is associated with physiological strain, low job satisfaction and job-related tension.
g Conflict can also occur when workers are required to carry out tasks which they dislike or which they believe are outside their job description.

L. RELATIONSHIPS AT WORK

Fill in the blanks with the words given below:

Relationships, required, promoted, advantage, support, claim, pressure, experiences, inevitably, skills, consequences, environment.

Nobody would _____ that living with people is easy, and the _____ we have at work can be among the most stressful _____ in our daily lives. The types of relationships are:

- Relationships with superiors.
  Workers who felt under _____ reported that their boss gave them unhelpful criticism, took _____ of them, and showed favouritism to certain staff.
- Relationships with subordinates.
  Some people are _____ to management roles because of their expertise in non-management tasks. This means that the manager is being _____ to carry out new tasks which may not suit their particular _____ and inclinations. This is _____ stressful.
- Relationships with colleagues.
  Positive social _____ can help people at work, but a poor social_____ which is often described as "office polities", can have stressful _____.

M Match the beginnings and endings of the sentences. Give the text a headline:

1 Long-term stress at work can sometimes result...
2 The term burnout refers to a syndrome of emotional exhaustion, depersonalization, and...
3 It is experienced by some people at work, especially when their job...
4 Maslach observed that professional health workers who become burnt-out start to lose their caring and concern for patients and clients, and also...
5 Burnout is associated with higher rates of absenteeism, poorer job performance, worsening relationships with colleagues, poor personal health, and...
6 Harris points out that the general lower level of working performance associated with burn-out leads to...
7 Research suggests that a number of the causes of burnout are due to...
8 For example, burnout is more likely to occur when workers have a large number of patients they are responsible for, or when they are...
9 The suggested answer for organizations to prevent burnout is...

a ...to adjust work schedules so that workers have enough break from the demands of patient contact.
b ...an increased probability of accidents.
c ...the structure of the organization.
d ...working long hours with a large amount of direct contact with patients.
e ...reduced personal effectiveness at work.
f ...problems with personal relationships.
g ...start to feel bad about themselves.
h ...requires intense contact with people, usually clients or patients.

N Read the following sentences and rearrange the sentences to form a logical paragraph. Give it a headline:

a Unemployed people have a very ambiguous role, and they do not get the support from relationships at work.
b An important footnote to any discussion of work and stress is the issue of unemployment and stress.
c Being unemployed means being poor and low income is a major risk factor in health.
d Unemployment brings its own stresses.
e A review of this topic suggests that the unemployed generally have lower levels of personal happiness, self-esteem and psychological well being.
f Interestingly, and most alarmingly, this group of people does not appear in government health statistics.
g Their prospects for career development are nil, and the social climate in Britain still stigmatises the unemployed, even though there are very few jobs available.
h These documents give breakdowns of health by social class, but do not give figures for the health risks of being unemployed.

O Seven sentences have been removed from the text. Choose from the sentences a—g the one which fits each gap 1—7.

a Personnel selection and placement became firmly established during the Second World War, when research showed that carefully constructed psychometric tests could successfully identify people most likely to succeed as aircraft pilots, navigators, bombardiers, or other skilled members of the armed services.
b A job analysis can be a helpful guide for recruiters, a basis upon which

screening tests for applicants can be devised, and a starting-point for instructors who wish to develop job training programmes for employees.

c The optimal combination of training techniques for a particular job depends on considerations of time, expense, and effectiveness.

d The next step is the construction of a job specification, describing what a person in the job ought ideally to do.

e In selecting trainee computer programmers, on the other hand, the reverse may apply, because false positives may not matter very much and the primary objective may be to avoid false negatives that entail overlooking potentially able candidates.

f They are the following: verbal ability, spatial visualization, numerical ability, perceptual speed and accuracy, and psychomotor ability (including manual dexterity).

g In particular, the relative costs of two different kinds of selection and placement errors, called false positives and false negatives, have to be weighed against each other.

Personnel psychology includes job analysis, personnel selection and placement, and training of employees in industry. An occupational psychologist usually begins a job analysis by producing a job description, in the form of a detailed description of the work normally done by a person carrying out the job. 1 _____ The final step is the specification of a set of job requirements, consisting of a list of the skills and training needed by a person to perform the job satisfactorily. The list of job requirements may be viewed as a distillation of the personal factors that are important in carrying out the work. Job analysis is used in many branches of personnel work, including selection and placement of employees and evaluation of employee productivity for purposes of promotion. 2 _____

Most personnel psychologists spend a great deal of their time on employee selection and placement, and it is obviously in the interests of both employers and employees that people should be recruited into jobs that are best suited to their individual aptitudes and interests. 3 _____

The class of tests most often used by personnel psychologists is those designed to measure specific aptitudes and abilities. Research has suggested that five groups of aptitudes and abilities account, singly or in various combinations, for success in a wide range of jobs. 4 _____ Reliable and valid tests have been devised for measuring these qualities, and they are widely used in personnel work. Equally useful for certain kinds of jobs are tests of interests and personality.

Research has shown that such personal characteristics can be evaluated much more accurately by objective tests than by subjective methods such as interviews.

Various factors have to be borne in mind when test results, together with employee records and references, are used for selecting employees and placing them in particular positions. 5 _____ For example, in selecting astronauts, the

consequences of false positives (incorrect predictions that certain candidates will succeed at the job) are likely to be much more costly than false negatives (incorrect predictions that certain candidates will turn out to be unsuitable). 6 _____

Personnel psychologists are sometimes involved in devising, implementing, and evaluating training methods.

Many different techniques of training are used, including on-the-job coaching, demonstrations, simulations (used in training aircraft pilots and air traffic controllers, for example), lectures, printed instruction manuals, films, and programmed or computer-administered instruction. 7 _____ So personnel psychologists often have to evaluate these factors in order to devise the best training programmes in specific cases.

8. PAIN

A. THEORIES OF PAIN

Read the information about three theories of pain to answer what they suggest and what their strong and weak points are:

I. SPECIFICITY THEORY

The traditional understanding of pain was described by specificity theory, which basically proposed that a special system of nerves carries messages from pain receptors in the skin to a pain centre in the brain. One of the points in favour of this approach was the discovery that there are specialised receptors in the skin for different sensations like heat and touch. The problem with the approach, as Melzack and Wall (1988) point out, is that the specialised receptors respond to certain unpleasant stimuli (a physiological event), but this does not mean that we always feel pain (a psychological experience). The examples of injury without pain described above, show that there is not a direct connection between stimulation and pain. This point is reinforced by the evidence from neuralgia and causalgia, where a gentle touch can trigger a painful reaction.

A further argument against specificity theory comes from physiological evidence. For example, the technique of neurography allows us to record the activity of specific nerves and we can match up this activity to the sensations that people are feeling. This research found that there is not a close connection between the activity of certain nerves and particular sensations in the person. For example, Chery Croze and Duclaux (1980) found that the onset of pain was not connected with the onset of activity in the specialised nerves. Also, different painful stimuli such as chemicals, pressure and heat provoke activity in different groups of nerves, but people are unable to tell the difference between the different stimuli despite getting these different messages in their nervous system.

II. PATTERN THEORIES

Fill in the gaps with the appropriate verbs:

Make, respond, is affected, suggest, bring, are shared, will develop.

Pattern theories, in contrast to specificity theories, _____ that there are no separate systems for perceiving pain, but instead the nerves _____ with other senses such as touch. According to these theories, the most important feature of pain is the pattern of activity in the nervous system which _____ by a number of factors including the amount of stimulation. For example, as the pressure of the touch increases, the sensation _____ into one of constriction and eventually to pain.
There are three types of receptor cells and nerve pathways that are important in pain. Firstly, there are nociceptive cells, which _____ to pain but not to other stimuli. Secondly, there is another class of cells which respond to intense stimuli (in other words, pain) as well as weak stimuli like touch. Thirdly, there is a class of cells which respond just to touch and not to pain.
So how do we _____ sense of all this nervous system information and feel pain?
This _____us to the best current model of the phenomena — the gate control theory.

III. GATE CONTROL THEORY

The gate control theory, first proposed by Melzack and Wall in the 1960s, combines the medical approach of previous theories with psychological and social factors that contribute to the experience of pain (the biopsychosocial approach). The theory suggests that there is a "gate" in the nervous system that either allows pain messages to travel to the brain, or stops those messages.
The gate control theory is biologically quite complex and the description of the nervous system pathways is beyond the scope of this text. The theory describes in some detail which nerves produce what reaction in the nervous system, and proposes a model for the control of the transmission of pain messages up the spinal cord to the brain. According to the theory, the gate is in the spinal cord and it is opened or closed by the following factors:

1 **Activity in the pain fibres**
This is the "specificity" part of the theory, and suggests that activity in the small diameter fibres, which respond specifically to pain, will open the gate.
2 **Activity in other sensory nerves**
This is the "pattern" part of the theory and refers to the large diameter nerves that carry information about harmless sensations such as touching, rubbing or scratching. Activity in these nerves will close the gate; this is in a

line with the observation that light rubbing around painful areas will reduce the pain.

3 **Messages from the brain**
This is the central control mechanism and it responds to states such as anxiety or excitement to open or close the gate. The idea that the brain can influence the experience of pain explains why distracting people can help them not to notice the pain so much.

There are a number of factors that act to open or close the pain gate. As yet, only some of the features of the model have been discovered in the nervous system and so it remains a model that explains the evidence rather than an accurate description of nervous system pathways. The model does, however, have a lot of support and it is accepted as a useful model for discussion and research about pain.

B. FACTORS AFFECTING PAIN

Fill in the gaps with the appropriate verbs:

Need, connected, lead, tell, evaluate, have, refers, suggest, last.

As well as proposing there is a gate for pain in the spinal cord, Melzack and Wall also _____ that the experience of pain is made up of three components: sensation, emotion and cognition. Sensation _____ to the information from our senses about the location of the pain and the type of pain it is. We _____ an emotional reaction to pain which can increase or diminish the experience of the pain. This emotional reaction is also _____ with our motivation to try and escape it or try and tackle it head on. We also _____ the pain and this is the cognitive component. This evaluation may _____ us the pain is temporary and we just _____ to rest, but it might tell us that the pain will _____a while and there is nothing we can do about it. The different interpretations of the same sensations will _____ to a different experience of pain.

C. MEASURING PAIN

Look through the text and find the answers to the following questions:

---

a Why do psychologists have a problem when they try to measure pain?
b What are the methods that psychologists can use to collect information about pain?

c What is the advantage and disadvantage of the interview method?
d What are the factors that contribute to pain?

"This won't hurt a bit", says the doctor just before inflicting excruciating pain on you. How does the doctor know how much pain you will feel? It is important that we are able to know how much pain people are feeling, and it is also important to know what type of pain they are feeling. Like most personal experiences, it is difficult to make comparisons between what I experience and what you experience, and so psychologists have a problem when they try to measure pain.
One approach to pain measurement is that of Karoly (1985) who suggests that we should not just focus on the immediate experience of pain but should examine all the factors that contribute to pain. Karoly identifies six key elements:

1 Sensory: for example, the intensity, duration, threshold, tolerance, location etc.
2 Neurophysiological: for example, brain-wave activity, heart rate etc.
3 Emotional and motivational: for example, anxiety, anger, depression, resentment etc.
4 Behavioural: for example, avoidance of exercise, pain complaints etc.
5 Impact on lifestyle: for example, marital distress, changes in sexual behaviour etc.
6 Information processing: for example, problem-solving skills, coping styles, health beliefs etc.

The methods that psychologists can use to collect information about pain include interviews, behavioural observation, psychometric measures, medical records and physiological measures. The main advantage of the interview method is that it can be used to cover most of the elements suggested by Karoly . The problem is the time taken to obtain the information and the skill required to interpret the responses.

D. CONTROLLING PAIN

There are numerous ways to alleviate pain and it is not possible in this text to do more than provide some examples from the range of different methods. We will look at some chemical treatments, surgical attempts, physical therapies, and psychological treatments.

Look through the text and find the answers to the following questions:

a What are the therapeutic actions of aspirin and other similar drugs?
b What are their side-effects?
c What is the difference between aspirin and paracetamol in action?
d What chemicals have been made from the opium poppy?
e How do opiates act?
f What is the main reason that opiates are so effective in pain control?
g What are the ways of taking drugs?
h What is a recent development with pain control?

A clergyman from Chipping Norton wrote to The Royal Society in 1763 to describe how useful the extract of willow was in the relief of rheumatism and bouts of fever. The active ingredient of willow extract is **acetylsalicylic acid** which we are more familiar with as **aspirin**. Aspirin, and other similar drugs such as **ibuprofen**, have three therapeutic actions: first, against pain; secondly, against inflammation; and thirdly, against fever. They appear to work on the damaged tissue that is causing the pain and inflammation, and they have no known effect on the nervous system. These drugs are heavily used today and the only drawback is the number of side-effects such as gastric irritation and bleeding and also (with large doses) deafness. There is another mild analgesic called **acetaminophen** (more commonly known as **paracetamol**) which has pain relief properties similar to those of aspirin. It does not, however, have the same anti-inflammatory action as aspirin and it is not known how it creates analgesia.

Another major set of chemicals used in pain relief come from the opium poppy. The medical value of the extract of this poppy has been known about for thousands of years and its use is recorded as far back as 1550 BC. A number of chemicals have been made from this poppy including **morphine, heroin and codeine**. Although the different chemicals vary in the amount of pain relief they produce, they all have a similar action, producing analgesia and, as the dose increases, also producing drowsiness, changes of mood and mental clouding.

Opiates act on the central nervous system in the brain and also in the spinal cord. Their most likely action is to inhibit pain messages from travelling to the brain (in other words, they close the gate). The main reason that opiates are so effective in pain control is that the nervous system contains many nerves that respond to chemicals that are very similar to opiates. These nerves are involved in the experience of pain, though their action is complex and not yet fully understood.

We usually take drugs by injection or by swallowing pills, though if you're very unlucky then you might receive the medication by suppository. However, a re-

cent development with pain control has been to allow patients to self-administer the drug by pressing a button on a small machine beside the bed. The machine is set up so that the patient cannot accidentally (or purposefully) give themselves too much medication. Patients do not take this opportunity to give themselves the largest possible amount of medication, but in fact use their control over the drug to balance the pain with the mental clouding that high doses produce. The overall result is a reduction in drug use in comparison with the amount given by medical staff (Keeri-Szanto, 1979).

SURGICAL ATTEMPTS

Rearrange the sentences to form a logical paragraph:

a When medication fails to deal with the pain, surgeons will destroy the branch of sensory nerves to the facial area.
b This only goes to show how complex our pain senses are.
c One condition that has attracted surgery is trigeminal neuralgia which produces persistent and excruciating pain in the face.
d Medical people have attempted to reduce pain through surgery by cutting nerve pathways or making lesions in special centres in the brain.
e On the whole, surgical techniques are only recommended for people with terminal illnesses who want medium-term relief from pain to make the rest of their lives more comfortable.
f This produces numbness in the face, but, sadly, only temporary relief from the pain, which recurs in many patients.
g The story is the same in other surgical interventions in that any pain relief that occurs is usually only temporary.

PHYSICAL THERAPIES

Make up questions to the following answers:

a Manual therapies, mechanical therapies, heat and cold treatments and electrotherapy.
b Bruises, torn muscles and arthritis.
c They produce sensory inputs that end up inhibiting the pain signals.
d Transcutaneous Electrical Nerve Stimulation.
e The patient receives mild pulses of electricity in the painful area.

There are a wide range of physical therapies that are used to relieve and control pain. These include manual therapies such as massage, mechanical therapies such as traction, heat treatments such as microwave diathermy and ultrasound, cold treatments such as ice packs, and electrotherapy such as electrical nerve stimulation.
Heat is widely used in the treatment of pain and is reported to be most effective for deep tissue injuries such as bruises, torn muscles and arthritis. It is generally considered doubtful that it speeds up the repair of these injuries. Given the extensive use of this treatment, it is remarkable that we do not know how it works. One hypothesis for the action of this treatment and many other physical treatments is that they produce sensory inputs that end up inhibiting the pain signals (they close the gate).One method that has attracted a lot of research is the electrotherapy known as Transcutaneous Electrical Nerve Stimulation (TENS; *transcutaneous* means 'through the skin"). In this treatment the patient receives mild pulses of electricity in the painful area and this has been found to reduce chronic pain in a wide variety of conditions including neuralgia and arthritis.

PSYCHOLOGICAL TREATMENTS OF PAIN

As we have seen, psychological factors play a big role in the experience of pain. Over the past few years there has been a growing acceptance of the value of psychological interventions in the treatment of pain. Included in these interventions are relaxation, biofeedback, hypnosis, cognitive coping skills, operant techniques, mental imaging, self-efficacy and counselling.

E1 Answer the questions:

a What is hypnosis?
b Why is the use of hypnosis spreading?
c Can hypnosis be dangerous?
d Can hypnosis cause actual physical or mental harm?
e What are some of the uses of hypnosis in general medicine?
f Can hypnosis bring relief from pain?
g Why is hypnosis considered to be controversial?
h Does the hypnotic effect on the mind wear off?
i Can hypnosis overcome addictions such as smoking and overeating or drug or alcohol abuse?

E. HYPNOSIS

Read the text quickly and put "–" or "+" if hypnosis helps...

a getting rid of anxiety associated with the anticipation of pain
b in treating disorders of self-control
c quitting smoking
d losing weight
e in treating severe depressions
f the treatment of warts and some skin disorders
g in treating some forms of insomnia
h in treating drug or alcohol abuse
i in controlling the discomfort associated with quitting smoking
j in the relief of asthma allergies
k in arresting intractable hiccups

The technique of hypnosis has been accepted by the American Psychological Association.
In addition to many encouraging clinical reports, there is now a growing body of research which helps clarify the nature of hypnosis and supports its use in a variety of areas.
We know that hypnosis has many useful applications in medicine, such as in the treatment of pain. It can lower an individual's level of arousal, and it helps in the treatment of stress. It is effective in the treatment of some forms of asthma and in certain skin disorders. It can even help modify the response of the body's immune system. Hypnosis is also used in psychiatry in a variety of ways: in the context of psychodynamic therapy, to uncover feeling and memories; in the context of behavioural approaches, to facilitate imagery.
Many of the effects of hypnosis wear off rapidly. Logical posthypnotic suggestions do not tend to persist over long periods, but hypnosis can permanently distort memory if the hypnotised subject comes to believe that he has remembered something that had not actually occurred.
Like all therapeutic techniques, hypnosis has certain risks. Used in competent hands for appropriate reasons, hypnosis is very effective.
Hypnosis is a state or condition where the subject focuses his mind on the suggestions of the hypnotist so that he is able to experience distortions of memory or perception. For the time being, the subject suspends disbelief and lowers his critical judgement. A good way to think of it is that your mind becomes so focused that you really get into a fantasy. You become so absorbed in what you are thinking that you begin to experience it as reality.
Dramatic results have been achieved in the relief of asthma and some other allergies. This is because hypnosis can at times modify the body's immune system

and block some of the allergic reaction. Hypnosis can be quite effective in arresting intractable hiccups and treating some forms of severe insomnia. One of the more interesting uses is in the treatment of certain kinds of warts and some skin disorders.
It is very effective in the control of pain. Children with leukaemia, for example, must undergo a painful procedure to obtain bone-marrow specimens to assess their condition. With hypnosis you can relieve the anxiety associated with the anticipation of pain and help these children to tolerate this procedure relatively comfortably.
Generally speaking, hypnosis is not very effective in treating disorders of self-control. It won't make you do something that you can do voluntarily if you would put your mind to it — but that you really don't want to do for a variety of conscious and subconscious reasons.
In getting people to stop smoking, the success rate with hypnosis has not been dramatic. It's more help in controlling the discomfort associated with quitting rather than in quitting itself. For people trying to lose weight, hypnosis is only moderately and occasionally effective. For control of drugs and alcohol, hypnosis is virtually useless. In most cases of alcohol and drug abuse, there are complex psychological reasons that prevent the mind from responding to hypnotic suggestions for self-control. Finally, hypnosis has very little use in the major psychoses. It is rarely, if ever, the treatment of choice for severe depressions, mania or schizophrenia.

E2 Make up word combinations. Translate them into Ukrainian:

1. tolerate	**a.** smoking
2. overcome	**b.** approach
3. quit	**c.** the technique
4. behavioural	**d.** addiction
5. distortion	**e.** imagery
6. accept	**f.** of memory
7. facilitate	**g.** hiccups
8. intractable	**h.** the procedure

E3 Read the words and translate them into Ukrainian:

Useful application in medicine, the discomfort associated with quitting rather than in quitting itself, to do for a variety of conscious and subconscious reasons, dramatic results in certain skin disorders, encouraging clinical re-

ports, growing body of research, lower an individual's level of arousal, effective in arresting intractable hiccups, relieve the anxiety associated with the anticipation of pain, the treatment of pain and stress, modify the response of the body's immune system.

E4 Fill in the blanks using the words given below:

Dramatic, severe, disorders, intractable, arousal, application, effective, modify, mind, useless, pain, experience, condition.

a Hypnosis is a state or _____ where the subject focuses his _____ on the suggestions of the hypnotist so that he is able to _____ distortions of memory or perception.
b Hypnosis is virtually _____ for control of drugs and alcohol.
c Hypnosis can be quite _____ in arresting _____ hiccups and even at times _____ the response of the body's immune system.
d _____results have been achieved in the treatment of certain skin _____ and some forms of _____ insomnia.
e You can relieve the anxiety associated with the anticipation of _____.
f Hypnosis can lower an individual's level of _____
g Hypnosis has useful _____ in the treatment of pain and stress.

E5 Agree or disagree with the following statements:

a Hypnosis can permanently distort memory.
b Hypnosis cause actual physical or mental harm.
c The mind of a hypnotised subject becomes so focused on the suggestions of the hypnotist that he really gets into a fantasy.
d Hypnosis is very effective in treating disorders of self-control.
e Hypnosis is virtually useless for control of drugs and alcohol.
f Hypnosis is a condition when a subject is so absorbed in what he is thinking that he experiences it as reality.
g Hypnosis helps to overcome addictions such as smoking or overeating.

E6 Complete the following sentences:

a Hypnosis is very effective in...
b Hypnosis is moderately and occasionally...
c Hypnosis can permanently distort memory if...
d With hypnosis a subject lowers...
e Hypnosis can lower...
f Hypnosis can bring relief from...

F. OPERANT TECHNIQUES

Look through the text to find out the answers to the following questions:

a What is the purpose of operant techniques?
b What principles do the operant techniques use?
c In what cases is this approach supposed to be most useful?
d When is it not likely to have much effect?

The idea behind operant techniques is to use the principles of operant conditioning to encourage behaviours that reduce pain and discourage behaviours that increase pain. Erskine and Williams (1989) suggest that these methods work by:

- using social reinforcement and periods of rest to gradually increase activity levels
- gradually decreasing the use of medication
- training people associated with the patient (medical staff and family) not to reinforce the pain behaviours through their sympathy and practical help.

This approach only deals with behavioural responses to pain and is most useful if someone has developed inappropriate behaviours for dealing with their pain. These behaviours might be the excessive use of drugs or the avoidance of activity. However, if someone has chronic pain from cancer, for example, then this approach is not likely to have much effect.

G. COPING TRAINING

Fill in the gaps with the appropriate verbs:

Found, shown, argue, reported, developed, were responding, has not happened, made, looked, received, were suffering, included, experienced.

Easier and Rehfisch (1990) _____ at how coping training can be used to help people who _____ from chronic pain. They _____ a 12-week intervention package, which _____ training patients to reinterpret the pain experience, training in physical relaxation techniques, avoiding negative and catastrophic thinking, and training in how to use distraction at key times. They _____ that compared with an untreated waiting list control group, there were significant improvements for these patients at a six-month follow-up. The patients _____ fewer general and pain-related symptoms, and a lower level of anxiety and depression. There was also a decline in the number of visits which they _____ to the doctor.
The implication of the study is that behavioural interventions to enhance coping skills in distressing medical conditions can be beneficial and relatively long-lasting. There are, of course, always problems with this type of study. For example, it is always possible that the patients _____ to the additional interest in their cases _____ by those who had developed the training strategy; without the introduction of a third group who _____ just as much attention, it is not possible to be sure that this _____. (Although many of those working with chronic pain patients would _____ that even if there was this type of "placebo effect" going on, it wouldn't matter — the important thing is that the patients subjectively _____ less pain as a result of what happened to them!).

H. SELF-EFFICACY

Self-efficacy (the sense of our ability to do something) may be a significant concept in the control of pain. Bandura et al. (1988) carried out an experimental study of the effect of self-efficacy on the ability to deal with pain. The psychologists took two groups of people and in one group they created a sense of high self-efficacy and in the other they created a sense of low self-efficacy. They did this by manipulating the demands of a mental arithmetic task. Half of each group were then given an injection of either a saline solution, which would have no effect, or naloxone. Naloxone blocks the action of opiates in the nervous system which means that it blocks the pain-killing response of the body. All of the research participants then immersed an arm in ice-cold water, and their pain thresholds were measured, partly by physiological stress measures, and partly by timing how long they could endure the pain.

Bandura et al. found that, among the research participants who were given the placebo injection (saline), those with low self-efficacy beliefs experienced higher levels of stress during the cognitive test, but could withstand more painful stimulation than those with high self-efficacy beliefs. The two groups given naloxone did not differ in their pain tolerance, which was low. The researchers suggested that because low self-efficacy beliefs are stressful for the body, it may be that such people secrete a higher level of natural painkillers. While this might seem to be beneficial on the surface, in the long term it could have harmful effects on the immune system, rendering the person more vulnerable to illness. (Another possibility, of course, is that those with high self-efficacy beliefs were more ready to take action to change their situation and withdraw from the test, although this doesn't explain why there should be no difference between the two groups who received the "real" injection.)

H1 Make up questions to the following answers:

a An injection of either a saline solution or naloxone.
b It blocks the pain-killing response of the body.
c Their pain thresholds were measured.
d They experienced higher levels of stress during the cognitive test.
e It may be that such people secrete a higher level of natural painkillers.
f It could have harmful effects on the immune system.

SUMMARY

Complete the sentences with the following words to make a summary:

To help, helping, to explain, considering, illustrates, devise.

The study of pain _____ the importance of the biopsychosocial model, since it is impossible _____ all the phenomena of pain without _____ psychological and social factors as well as the more obvious biological factors. The theories of pain are still at a relatively early stage, though they have been useful in _____ psychologists _____ various treatments _____ in the management of pain.

supplementary reading

DREAMS POINT TO A DISEASE

Look through the text to find out what is the relationship between our ailments and our dreams:

This question had interested even Hippocrates and Aristotle who believed that dreams were the earliest indication of a disease.
In our time, Dr. V. Kasatkin, a neuropathologist who has been studying people's dreams for as long as forty years, has proved that visions and emotions that appear in our sleep can help diagnose a disease up to several years before the first symptoms are manifested. He summed up the result of his research in his monograph, "The Theory of Dreams", which has brought him known at home and abroad. He has also compiled "The Album of Dreams" (a sort of an anthology of visions), which illustrates the relationship between the nature of one's dreams and the specifics of one's organism, one's experience, the state of health, etc.
The regularities discovered make it possible to use people's dreams in studying their personality, in medical diagnostics, and in forensic medicine. Below there are some of these regularities.

THE SENSATION OF "FALLING" AND HEART AILMENTS

There has always been an aura of mystery about sleep. Although neuropathologists have by now achieved a great deal in studying it, there still remain many unknowns. But one thing can probably be considered indisputable — integrated into a person's dreams are his psychological essence, physiological peculiarities, and signals from the outside. We have studied more than 22,000 various dreams, covering both sick and healthy people, young and old, men and women, representatives of most varied professions.
The relevant experiments and analysis of heavy dreams have confirmed that in most cases images occurring during sleep are the earliest indicators of a latent incubation period of a disease.
How can this be explained? Consider it this way: signals of an incipient disease or malfunction in a human organism are too weak to excite the pain receptors, but strong enough to innervate the extremely sensitive optic area in the brain. The innervated optic cells "conjure up" images which point rather accurately to a ris-

ing disease. Quite often the same "tale-telling" dream keeps recurring. The frequency and the particular character of dreams can help determine the nature of the disease, its focus and often to what degree it has advanced.

Specific dreams begin to appear usually two to three months before, say, hypertension becomes apparent, a month before gastritis, and two months before the first symptoms of TB. Some pathologic processes begin to manifest themselves in dreams as early as a year, two years and even three years before the appearance of unmistakable clinical symptoms. This is of much import considering that certain ailments cannot be detected by functional diagnostics at an early stage, whereas a careful analysis of dreams helps localise the disease with utmost precision. For example, in cases of lung affliction a person usually dreams of situations in which he suffers from suffocation, either through being unable to emerge from deep under the water, or because he is “climbing” a high mountain, or for some other reason. In cases of cardiac malfunction a person often suffers from nightmares accompanied by a terrible fear of death, or can see himself falling into an abyss... One of our patients often dreamed of fires and blood, and would wake up cold with fear. A medical examination confirmed our verdict — a rheumatic heart.

Are there ailments hard to forecast on the basis of the dreams? Yes, there are. They are, as a rule, quickly progressing infectious diseases — influenza, acute catarrh of the respiratory tract, enteric and spotted fever. In such cases the time between the first alarm signals “sounded” during sleep and the actual beginning of the disease is so small that the signals are merely a statement of fact.

9. CHRONIC DISORDERS

A Read the following sentences and rearrange them to form a logical paragraph:

a What this means is that we are likely to have to deal with chronic disorders some time during our lives.
b However, there are a number of key issues that are common to many chronic disorders.
c Chronic disorders are ones that persist for a long period of time and probably get progressively worse.
d It is estimated that at any given time, around 50% of the general population have a chronic condition that requires medical management.
e In fact, most of us will eventually develop a chronic disorder that will be a major factor in our death.
f These conditions range from mild disorders such as partial hearing loss, to serious life-threatening disorders such as diabetes, end-stage renal disease and heart disease.
g Each chronic disorder has a unique set of psychological effects and a range of possible psychological interventions.

B. DEVELOPING CHRONIC DISORDERS

Psychologists are interested in whether the type of person we are and the way we behave have any connection with chronic disorders. In particular, they have looked at negative affective styles, which is a term attributed to people who are identifiably more depressed, more anxious and more hostile than the average. In a review of this area, Taylor and Aspinwall point out that research has found some weak associations between negative affective styles and several disorders such as coronary heart disease, asthma, headaches, ulcers and arthritis. They raise the possibility that there is a disease-prone personality type, or behaviour pattern. An example of this is the Type A behaviour pattern, but the evidence on this is very mixed, and the associations between illness and behaviour pattern are quite weak.
An alternative approach has been to look for behaviour that might enhance good health. There has been some interest in the protective role of positive emotional states such as optimism and perceived control. For example, Taylor and Aspin-

wall review a number of studies that suggest optimism is associated with people experiencing fewer symptoms, and with people making a better or speedier recovery. The downside to this research is the growing belief that people who have chronic disorders should be cheerful all the time so that they can get better more quickly. It is not difficult to imagine the response of many people suffering pain when a health worker tells them to cheer up and "put on a happy face".

One of the many problems with research into the connections between behaviour patterns and illness is that chronic illness often develops long before it is visible to health workers. Many cancers, for example, develop over a period of years before they create discomfort to the patient. It is, therefore, difficult to examine the behaviour of the patient, and compare it to that of people without the disorder because their behaviour might already be affected by the long development of the cancer. The various attempts to relate cancers to psychological variables have produced very mixed results. The research has concentrated on the role of variables such as depression, social isolation, being passive and being unaggressive, though it is fair to say that no clear picture has developed.

The same lack of clear evidence is also the case for other chronic disorders such as diabetes and arthritis despite various attempts to identify behaviours that make the disorder more likely. This is also true for hypertension, though the exception is the behaviour pattern referred to as John Henryism.

B1 Agree or disagree with the following statements:

a Chronic disorders have no psychological effects.
b People have to deal with chronic disorders some time during their lives.
c Half of the general population has a chronic condition that requires medical management.
d Some chronic illnesses often develop long before they are visible to health workers.
e Social isolation is associated with cancer.
f There some features that are common to many disorders.
g There is no disease-prone personality type.

B2 Complete the following sentences:

a Chronic disorders are...
b Each chronic disorder has...
c Psychologists are interested in...
d Chronic illnesses develop...

e The associations between behaviour pattern and illness...
f The problem with research...
g The protective role of positive emotional states...

C. THE RESPONSE TO CHRONIC DISORDERS

Make up questions to the text and answer them:

The two most obvious responses to the onset of a chronic disorder are anxiety and depression.
Some of the things that produce high levels of anxiety are:

- waiting for test results
- a diagnosis of cancer
- invasive procedures
- the side-effects of treatment
- changes to lifestyle
- dependency on health workers
- fear of recurrence
- uncertainty.

Depression is a disabling reaction to chronic illness, and it is estimated that between one quarter and one third of hospital admissions report these feelings. Depression also appears to have an impact on recovery rates. It is difficult, however, to accurately identify depression in ill people since many of the symptoms such as fatigue, sleeplessness and weight loss might also be symptoms of the disease.

D. UNCERTAINTY

One of the possible causes of anxiety and depression is the uncertainty that people have about their illness and what will happen to them.
Uncertainty is an important issue for chronically and terminally ill people, and a major source of stress in their lives. The feeling of uncertainty occurs when someone does not have a cognitive framework to understand their condition or situation, and when they cannot predict the outcomes of their behaviour or condition. Few people tolerate uncertainty well, and they deal with it in a variety of ways. The basic ways that people cope with uncertainty are by:

- vigilance: where people try and research possible diagnoses and so predict how their condition will develop

- avoidance: where people try and protect themselves against unpleasant knowledge by attributing symptoms to less harmful conditions, and not seeking medical advice.

These strategies create frameworks that allow the people to explain their situation to themselves and increase their sense of personal control.
Each chronic disorder has its own set of uncertainties, but there are some general themes common to many of them.

D1 Match the corresponding parts to make up the sentences. Translate them into Ukrainian:

1. The most obvious responses to the onset of a chronic disorder...	**a.** ...produce high levels of anxiety.
2. Changes to lifestyle and uncertainty...	**b.** ...are by avoidance and vigilance.
3. Depression...	**c.** ...tolerate uncertainty well.
4. Fatigue and sleeplessness...	**d.** ...is a major source of stress.
5. Few people...	**e.** ...are anxiety and depression.
6. Uncertainty...	**f.** ...are the symptoms of a disease.
7. The ways to cope with uncertainty...	**g.** ...is a reaction to a chronic illness.

D2 Answer the questions:

a What is depression?
b What are the causes of depression and anxiety?
c When does the feeling of uncertainty occur?
d What are the ways to cope with uncertainty?
e What increases the people's sense of personal control?
f What is the role of uncertainty?

Answer the following questions:

a How much control do you have over your behaviour?
b How much control do you think you have over your environment?
c How much control do you have over your health?

F Read the following sentences and rearrange them to form a logical paragraph. Give it a headline:

a He suggested that people differ in the way they experience their locus of control — in other words, where the control over events in their life comes from.
b Psychologists believe that the amount of control that we perceive ourselves to have is very important to us.
c They perceive their lives as being controlled by outside forces; things happen to them.
d Some people experience themselves as having an external locus of control, which means they do not feel in control of events.
e On the other hand, some people experience themselves as having an internal locus of control, which means they experience themselves as having personal control over themselves and events; they do things.
f Rotter first described the concept of locus of control and applied it to range of activities such as gambling, political activism and hospitalisation.

G Complete the following sentences with the given words:

Consequently; For example; One reason; However; So.

The concept of locus of control was measured using a series of statements that people could either agree or disagree with. _____, it soon became apparent that people's control beliefs about their health were quite different from their control beliefs about other aspects of their behaviour. _____, health psychologists such as Wallston and Devellis expanded the original scale beyond the simple external-internal dimension to develop health-specific psychometric tests. The multidimensional health locus of control scale measures three dimensions of health locus of control:

1 **Internality:** the extent to which locus of control for health is internal ("If I become sick, I have the power to make myself well again.")
2 **Chance:** the belief that chance or external factors are affecting the outcome of health problems ("Often I feel sick no matter what I do, if I am going to get sick, I will get sick.")
3 **Powerful others:** the belief in the control of powerful others (such as doctors) over our health ("Following doctor's orders to the letter is the best way for me to stay healthy.")

The health locus of control scales provide a simple way of investigating the effect of beliefs on health outcomes. _____, there has been a large amount of research using these scales, though the relationship between health locus of control and health outcome has not been as strong as we might have expected. _____ for this is that people have very different perceptions of their control over different areas of their health. _____, I may feel in control of my diet but unable to control my alcohol consumption. To deal with this problem, some scales have been developed that are even more specific, and look at such detailed beliefs as perceived control over pain.

G1 Match the corresponding parts to make up the sentences. Translate them into Ukrainian:

1. People differ in the way...	a. ...the belief in the control of powerful others over our health.
2. The amount of control we perceive ourselves...	b. ...is very important.
3. Internality is...	c. ...their control over different areas of their health.
4. Chance means...	d. ...they experience their locus of control.
5. People have different perceptions of...	e. ...the belief that external factors are affecting the outcome of health problems.
6. One of the dimensions of health locus of control is...	f. ...the extent to which locus of control for health is internal.

G2 Agree or disagree with the following statements:

a People's control belief about their health is different from the control belief about other aspects of their behaviour.

b People have the same perceptions of their control over different areas of their health.
c We perceive our lives as being controlled only by outside forces.
d Psychologists believe that the amount of control that people perceive themselves is not important to them.
e People experience themselves as having personal control over events.

H Rearrange the sentences to form a logical paragraph. Give it a headline:

a One way of screening for breast cancer is to carry out breast self-examination, but many women do not perform this procedure as often as they are recommended to.
b The findings suggested that women were more likely to carry out breast self-examination if they believed that the health care system did not have a prominent role to play in their health.
c Murray and McMillan looked at whether various psychological approaches, including the health belief model and health locus of control, could be used to predict whether women would carry out the procedure or not.
d These findings show how some aspects of health locus of control can be applied to our behaviour.
e Their questionnaire study of over 400 women found that the dimension of powerful others was a predictor of breast examination.
f The same study, however, found that health locus of control had no effect on whether women would choose to attend a clinic for a cervical smear (another method of screening for cancer), and this illustrates how specific these effects are.
g This is an example of self-efficacy.
h An example of research on the health locus of control is an investigation into the cancer-screening behaviour of women carried out by Murray and McMillan.
i In fact, the most important predictor of breast examination discovered in this study was not the women's locus of control but their confidence in how to carry out self-examination.

I. SELF-EFFICACY

Self-efficacy is a belief that you can perform adequately in a particular situation. Your sense of personal competence influences your perception, motivation and performance. Bandura suggested that self-efficacy beliefs are important to us, because they are concerned with what we believe we are capable of. If we be-

lieve that we are able to engage in certain types of actions successfully, then we are more likely to put effort into carrying them out, and therefore we are more likely to develop the necessary skills.
It seems likely that beliefs about our self-efficacy will affect how much effort we put into any activity. In the area of health, if we do not believe that we can change our lifestyle and, for example, give up smoking, then we will probably not even try. Bandura suggested that it is a good thing if people have beliefs about their self-efficacies which are slightly higher than the evidence would suggest (in other words, they think they are more capable than they really are), because this encourages them to aim high, and, by doing so, to try harder and so develop their skills and abilities even further.
We make judgements of self-efficacy primarily on the bases of our achievements. Other sources of these judgements include:

- observations of the performance of others ("Well, if she can do it, then so can I")
- social and self-persuasion ("Oh, you know you can do it really")
- monitoring our emotional states, for example, if we are feeling anxious then this would suggest low expectations of efficacy ("I don't feel up to it today").

An example of a study that looks at the role of self-efficacy was an investigation into the use of condoms by college students (Wulfert and Wan). They found that their sample of students were well-informed about the health risks of unprotected sex, and the facts and myths of AIDS transmission. They found that knowledge had little effect on sexual behaviour and many of the students made inconsistent use of condoms. The factor that was the best predictor of condom use was, in fact, self-efficacy, or in other words, whether the students felt they could use a condom and still have a successful sexual encounter. This suggests that health education on the use of condoms should not concentrate on the health risks of unprotected sex but on encouraging a sense of self-efficacy in potential condom users.

I1 Complete the following sentences according to the text:

a If we _____ that we are able to _____ in certain types of actions successfully, then we are more likely to put _____ into carrying them out.
b Beliefs about our _____ affect how much effort we put into any _____.
c Our _____ of personal competence influences our _____, motivation and performance.
d Self-efficacy is a _____ that you can perform adequately in a particular situation.

e We are more likely to _____ the necessary skills if we think that we are more _____ than we really are.
f Health _____ should concentrate on _____ a sense of self-efficacy.
g If we do not believe that we can _____ our lifestyle then we will probably not even _____.

I2 Answer the questions:

a What is self-efficacy?
b What does your sense of personal competence influence?
c Why are self -efficacy beliefs important to us?
d What are the sources of making judgements?
e Why is it good if people think they are more capable than they really are?
f Can you give examples of self-efficacy?

J Read the following sentences and rearrange them to form a logical paragraph. Give it a headline:

a The problem for the dialysis patient is to adjust their lifestyle to deal with this long-term condition.
b This adjustment involves strict adherence to a fairly unpleasant diet, and dealing with the physical discomfort which grows between each dialysis which has to take place two or three times a week.
c In 1960 the longest that anyone had continued to live with dialysis was only 181 days whereas today survival can be well over ten years.
d However, with modern medicine techniques, patients can now survive for a long time either with regular dialysis or with a transplant.
e Kidney failure, or end-stage renal disease (ESRD) to use its technical name, used to be fatal.

K Choose the corresponding subtitles to the following paragraphs:

Psychosocial problems; Changed social life; Anxiety and depression; Passive non-compliance with medical demands; Depressive reactions; A heightened sense of mortality; Treatment; Suicidal reactions; Feeling ill; Sexual dysfunction.

The most frequently cited psychological problems reported by haemodialysis patients are:

1 Patients sometimes experience a general state of anxiety, and sometimes develop phobic responses to aspects of the dialysis such as having needles stuck into them.

2 Dialysis patients have a much higher suicide rate than the general population though this might be partly because they have the means to do it.

3 Diet control is an important ingredient of the treatment, but a survey by Britton et al. found that 50% of patients report difficulty with dietary restrictions, and 15% confessed to non-compliance with important parts of the diet.

4 Such as anorexia and sleep disturbance.

5 The three most common types of sexual problem are:

- a decrease or loss of libido in men and women,
- partial or total impotence in men,
- men reported difficulties in ejaculating; women reported insufficient or absent lubricant, accompanied by less frequent orgasm or loss of orgasmic response.

6 Some patients develop stronger relationships with their family and friends following the disease, but many experience relationship problems. One immediate problem is that many patients are unable to continue working and so their standard of living drops dramatically. This loss of work also changes the role the patient has in the family, and they might experience a loss of control over their lives. Other family members also take some of the strain. The children of patients show high levels of anxiety, depression, and psychosomatic problems. A survey of the patient's partners found that they felt depressed at how their partner had changed during the first year of dialysis, and were exhausted at the effort of coping.

A brief look at this list makes depressing reading, so it should be said that many people on dialysis are able to live productive and positive lives even though they have to adjust to the many stresses of their condition. These stresses, however, are very real and they make the lives of people with ESRD very different from what they were before they developed the disease. The stresses they experience include the following:

7 Many healthy people live their lives as if they are going to live forever, and in this country we pay little attention to our inevitable death and so make little preparation for it. People on dialysis, however, are constantly aware of their own mortality, partly because if they do not adhere to the treatment programme they will put their lives at risk. Another reason for the sense of mortality is that they are often treated in a group and so, over a period of time, they will witness other patients dying.

8 People receiving dialysis often experience a reduction in their energy level and often have feelings of illness including nausea, fatigue, restlessness, dizziness, itching and an inability to concentrate.

9 The loss of employment and money, combined with the reduced mobility, can all create stress. Chronic disorders can lead to lessened interest in social activities and family holidays. The patient has to develop interests that require only a little money and a minimal amount of mobility. Some people find this easier than others.

10 The regular treatment of being connected to a dialysis machine for several hours can create feelings of helplessness and dependency. It can also create a loss of personal power and a reduced sense of personal control and self-efficacy.

L Read the following sentences and rearrange them to form a logical paragraph. Give it a headline:

a Patients are reluctant to admit to adherence problems if they believe that the psychologists might inform the medical staff, since this might then reduce their chances of receiving a transplant.

b There are clearly a number of issues with this condition where psychologists could make a positive contribution.

c Patients spend many hours on dialysis machines and many of them will only agree to see a psychologist while they are dialysing since they do not want to extend their treatment time any further.

d However, there are also some obstacles to their involvement in the treatment.

e This might be because they see their condition as entirely physical, and they do not want to be labelled as someone who needs psychological treatment.

f One is the resistance of patients to any psychological treatment.

g This inhibits the interaction because of the lack of privacy and the dominating and distracting presence of the dialyser.

h Another obstacle to psychological intervention is the treatment setting itself.

i Alternatively, it might be because they want to avoid any discussion about their adherence to the treatment programme.

j Despite the obstacles to treatment, psychologists have made a number of interventions with renal dialysis patients, including:

- progressive muscle relaxation and bio-feedback for anxiety, panic attacks, and tension headaches
- operant methods to control the gagging and vomiting that often accompany the dialysis treatment

- token economies and behavioural contracting to help patients improve their diet control
- hypnotherapy for the excessive thirst created by the restricted diet
- sex therapy
- counselling and cognitive-behavioural therapy for depression
- ecological intervention to improve the psychosocial environment.

L1 Make up questions to the given answers:

a Treatment, changed social life, a heightened sense of mortality and feeling ill.
b If they adjust to the stresses of their condition.
c Psychosocial problems, non-compliance with medical demands, anxiety, depressive and even suicidal reactions.
d Since they do not want to extend their treatment time.
e To adjust their lifestyle to deal with the long-term condition.
f Strict adherence to an unpleasant diet.
g The resistance of patients to any psychological treatment.
h Because they want to avoid any discussion about their adherence to the treatment programme.

M Read the following sentences and rearrange them to form a logical paragraph. Give it a headline:

a Research studies into self-help groups for a variety of disorders such as cancer, hypertension and epilepsy found that the groups were effective in helping members to cope with the stigma of the disorder.
b Health professionals are generally supportive of self-help groups because they are quite convenient and relatively cheap.
c They also helped to develop the motivation to cope and to adhere to the treatment programme.
d People with chronic disorders sometimes get support from membership of a self-help group.
e The group can provide social support and information about the disorder; it can also provide role models for new patients on how to cope with the disorder and function as normally as possible.
f Interestingly, it has been impossible to identify why these groups are successful.
g This sort of group usually consists of other people with the disorder and sometimes includes their close relatives and friends.

h Furthermore, according to Taylor and Aspinwall, the people who join these groups are already in contact with the health services, and the large number of people who are relatively invisible to the health services are not helped by this means.

i Unfortunately, these groups only reach a very small proportion of the people with chronic disorders, and they also tend to attract mainly professional white women to the exclusion of other groups.

N Fill in the blanks with the words given below according to the meaning:

However, adaptation, although, useful, adhere, signs, relationship, denial, experienced, encourage, required, anxiety, avoid.

Sometimes we deny the evidence of our own eyes, and this can be useful if we want to _____ things that might cause _____ or pain. It appears that denial can sometimes be _____ in helping people to gradually come to terms with their chronic illness. _____, the suggestion that health workers should _____someone to deny the reality of their health is very controversial. The _____ between denial and health is complex, as shown in the research by Levine et al. Their study looked at people who had just _____myocardial infarction (MI — "heart attack" to you and me) and found that people who had high levels of denial had fewer days in intensive care and fewer _____ of cardiac dysfunction than people with low levels of _____. However, in the year following their discharge from hospital, the high denial patients showed less _____ to the disorder, they were less likely to _____ to the treatment programme and _____ more days back in hospital. So, _____ denial seems to help recovery in the short term, it hinders it in the long term.

supplementary reading

A. AIDS

Weitz carried out in-depth interviews with 25 people with AIDS and found seven main sources of uncertainty:

1 **Will I get AIDS?**
Fear of contracting AIDS is a big issue for gay and bisexual men. Among the respondents, some assumed they had the infection long before diagnosis, whereas others developed theories that reduced their personal risk.

2 **What do my symptoms mean?**
People often feel "under the weather" without necessarily being ill. If their symptoms persist, however, they have to make a decision at some point that they are no longer under the weather, but are, in fact, ill. The symptoms of AIDS build up gradually, and it is possible to blame the symptoms on a variety of causes. For example, several men initially blamed their night sweats and exhaustion on the heat.

3 **Why have I become ill?**
People like to blame illness on something. It might be their behaviour (not wrapping up on a cold day), or another person ("you sneezed on me last week"), or a situation (stress at work). The people with AIDS had all tried to come up with a reason for their illness, and although some had integrated it into religious experience (believing that AIDS was a test from God), most of them had underlying attributions of personal guilt. On the whole, they blamed their promiscuity, homosexuality, lack of forethought, or drug use, but they were still left with the question, 'Why me?

4 **Will I be able to function tomorrow?**
Most people can make accurate predictions about their likely state of health in the short-to-medium-term future. This is not so for many people with chronic disorders. AIDS causes unpredictable flare-ups and remissions. This made it very difficult for the respondents in the Weitz study to plan anything, even as simple as going shopping with someone the following Tuesday, because they did not know how they would feel on that day. The result of this was that they tended to avoid plans, both long and short term, to avoid disappointment. This meant their social world became smaller and less active.

5 **Will I be able to live with dignity?**
Fear of death is minimal compared to the fear of what life may become. In particular the respondents feared neurological impairment (which is common in people with AIDS), and disfigurement by Kaposi's sarcoma (a disfiguring skin cancer which occurs in 10% of people with AIDS). They especially feared the unusual illnesses whose effects they could not predict.

6 **Will I be able to "beat" AIDS?**
Can we beat death and live forever? The simple answer is 'no', but it did not stop the respondents from wondering whether God or medicine would be able to cure them.

7 **Will I be able to die with dignity?**
The end stage of many chronic disorders can be painful, uncomfortable and humiliating. Life can be prolonged by medical means far beyond a time when it retains any meaning or dignity. Concern about this issue led some of the

people with AIDS to sign living wills which would prevent physicians keeping them alive by extraordinary means (it is not possible to do this in the UK).

Managing uncertainty, then, is one of the major issues for people with AIDS. It is also a problem for people with other chronic disorders. Other common themes include dealing with disfigurement (fear of loss of femininity after a mastectomy), sexual problems and changes in social life.

A1 Complete the following sentences with the words given below:

Requires, fatigue, Human Immunodeficiency Virus, infections, system, caused, symptoms, Acquired Immune Deficiency Syndrome, cell, referred.

AIDS stands for _____.
HIV stands for _____.
It is generally believed that AIDS is _____ by HIV.
It attacks one type of white blood _____ (the T helper lymphocytes), reduces the competence of the immune_____, and makes the body vulnerable to attacks by malignancies and _____.
If someone is infected with HIV they can continue without any _____ for several years. Alternatively, they might develop a number of symptoms including swollen glands, weight loss, diarrhoea, fever and _____.
This collection of symptoms is _____ to as AIDS-related Complex (ARC).
The diagnosis of AIDS also _____ identification of malignancy or infection not associated with a healthy immune system.

B. IMPROVING HEALTH IN THE NURSING HOMES

The chronic condition we all share is ageing. We are all getting older, but is our decline inevitable and are there any interventions that can help us continue to live rich and productive lives?
A study by Langer and Rodin investigated whether it is possible to enhance the health of patients by changing the environment and organisation of their nursing home. In particular, Langer and Rodin wanted to find out whether the ability to make specific choices would have a general effect on their experience of their own level of control and competence (see the section on locus of control, above). The study was based in a nursing home in the USA, and it compared the patients living on two different floors of the same building. The aim of the study was to encourage a sense of responsibility and control in the residents on one floor and compare their long-term progress and general level of health with the control res-

idents on the other floor. The two sets of patients were similar in age and health status.
The nursing home administrator gave a talk to both groups which he introduced as some information about the nursing home. The experimental group were told:

- you have the responsibility of caring for yourselves
- you can decide how you want your rooms arranged
- you can decide how you want to spend your time it's your life
- it's your responsibility to make complaints known.

They were also offered a plant as a present, told that there was a movie showing in the home on Thursday and Friday, and asked which night, if any, they would like to go.
The control group were given a similar talk, the difference being that their personal responsibility and control was not emphasised. So, for example, they were given the present of a plant rather than offered it, and told that they would be scheduled to see the movie one night or the other, and told how the staff tried to make their rooms nice.
The researchers measured the sense of responsibility in the residents using questionnaires which were given one week before the communication and three weeks after. The results indicate some substantial differences between the two groups after three weeks. When the scores for the individual residents were examined, it showed that 93% of the experimental group, but only 21% of the control group, were judged to have improved. Sadly, the researchers did not measure the plants to see how they were doing.

C. AGEING

The chronic condition we all share is ageing. We are all getting older, but is our decline inevitable and are there any interventions that can help us continue to live rich and productive lives?
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C1 Agree or disagree with the following statements:

a Ageing and loneliness are chronic conditions we all share.
b It is impossible to enhance the health of patients by changing the environment and organisation of their nursing home.
c There are a lot of interventions that can help us continue to live rich and productive lives.
d The ability to make specific choices effects patients' experience of their own level of control.
e Any intervention has a substantial effect on the health and well being of the residents in the old people's home.
f The interventions for chronic illness include the role of self-help groups and the function of denial.

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