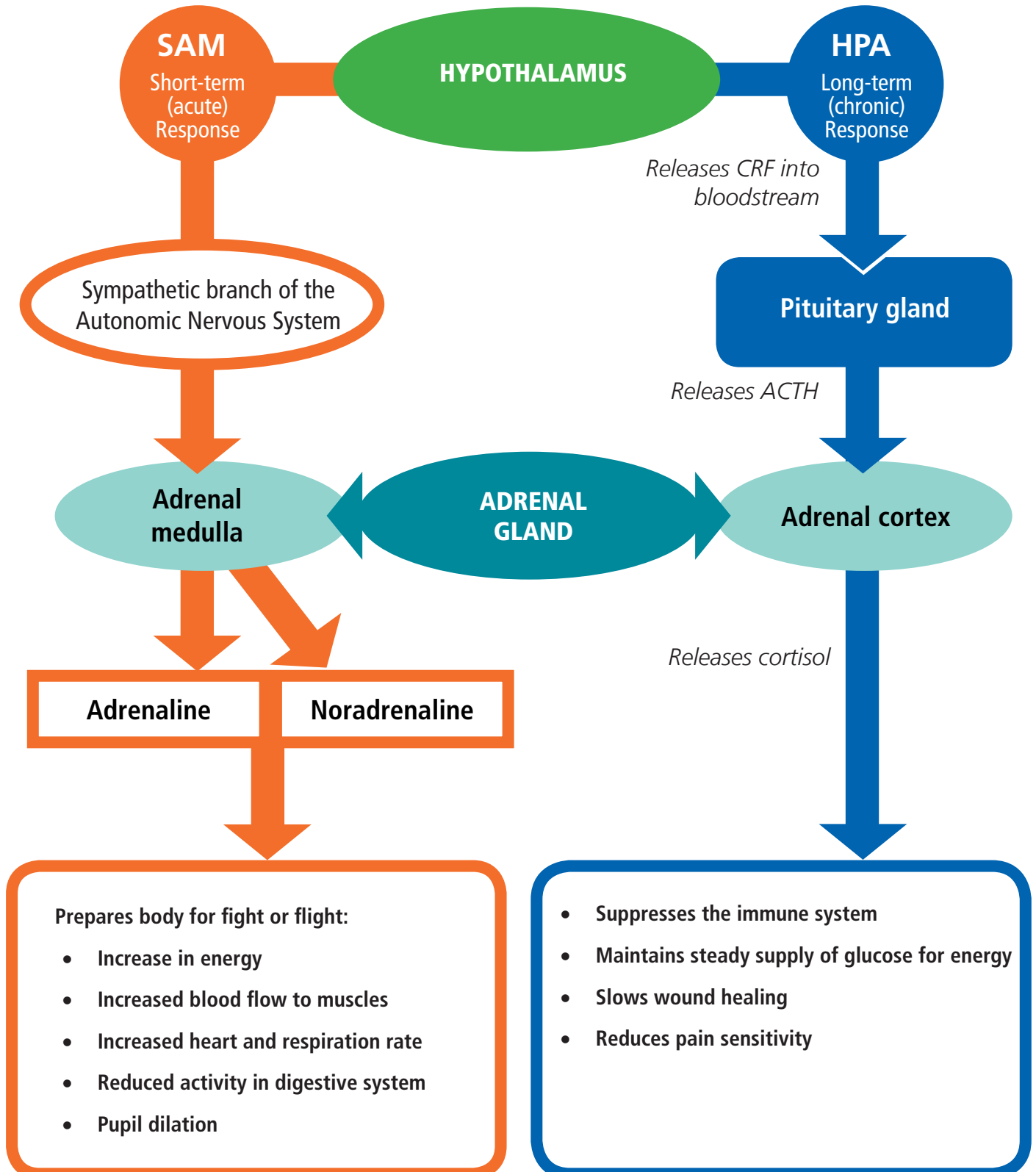


Higher brain centres interpret an event as stressful and send messages to the **hypothalamus** which activates **two systems** ...





Task

Students work in pairs to interview another pair of students on a psychological study related to the area of stress and the immune system or cardiovascular disorders.



1. You will work in pairs and select a study on stress and the immune system or stress and cardiovascular disorders. One pair will have to defend the study (the 'defenders') and a second pair will criticise it (the 'critics').
2. The 'critics' have to devise a list of at least six questions to put to the 'defenders' (the questions are related to criticisms of the study) and defenders have to think of ways that the limitations of the study can be defended.
3. The defenders will also provide a brief synopsis of the study to the rest of the class beforehand.
4. The defenders are then interviewed in front of the class by the critics. Each of the students has to ask/answer three questions about the study.
5. Afterwards the rest of the class will give you a rating on your performance (e.g. write a score and a reason on a mini-whiteboard) to see who produced the best performance.

Worked example

The defenders provide a brief summary of a study:

Cohen (1993) looked at the link between stress and the immune system. Participants were exposed to the common cold through being given nasal drops containing the virus. Participants then filled out three questionnaires to measure how stressed they were. They were then observed over the next week and it was found that those with high stress scores developed more clinical colds than those with low stress scores. This shows that stress has a negative effect on the immune system.

One student from the critics asks the first of their three questions ...

'How can you be sure that the participants were truly stressed?'

One student from the defenders offers a defence ...

'Although their answers could be affected by factors such as social desirability bias, they did fill out three different types of stress self-report measures which would give a more reliable insight into the participants' true stress levels.'

One student from the critics asks the next of their three questions ...

'Your study could be accused of lacking mundane realism as people do not get common colds through being given them in test tubes. How can you therefore apply your findings to the real world?'

One student from the defenders offers a defence ...

'That may be so but it would be very difficult to do this study as a natural experiment as you could not control the fact that everybody got the same type of colds therefore this was the most realistic way of simulating illness whilst still retaining an element of control.'

The next student from the critics asks the last of their three questions and the other student from the defenders offers a defence ...

Activity: Carry out the SRRS scale yourself

Holmes and Rahe (1967) examined 5000 patients' illness records and came up with 43 life events that seemed to precede illness.

They had a group of 400 participants rate each item in terms of how much stress it produced. Following this, each event was then given a LCU (life change unit score) to indicate the amount of upheaval it caused the person in their life and this formed the Social Readjustment Rating Scale.

Your susceptibility to illness and mental health problems:

Score of 300+: A high risk of illness

Score of 150–299: A moderate risk of illness

Score <150: Only a slight risk of illness

Evaluation of the SRRS

1. What is the main disadvantage of giving each critical life event a fixed value in terms of how stressful it is?
2. The scale requires you to accurately recall events that have occurred over the past year. What is the problem here?
3. Research using the SRRS finds a correlation between stress and illness. What is the problem with this?
4. What sources of stress in our lives does the scale fail to take into account?
5. How could this scale be used in a useful way in the real world?

Extension activity

Identify certain life events that would be suitable for someone of your age range that the SRRS does not consider.

Scoring:

To measure stress according to the SRRS, the number of LCUs a person has experienced in a given time period is calculated.

Circle each event if it has taken place in your life in the last 12 months. The final score will give a rough estimate of whether stress affects health.

Life event	Life change units
Death of a spouse	100
Divorce	73
Marital separation	65
Imprisonment	63
Death of a close family member	63
Personal injury or illness	53
Marriage	50
Dismissal from work	47
Marital reconciliation	45
Retirement	45
Change in health of family member	44
Pregnancy	40
Sexual difficulties	39
Gain a new family member	39
Business readjustment	39
Change in financial state	38
Death of a close friend	37
Change to different line of work	36
Change in frequency of arguments	35
Major mortgage	32
Foreclosure of mortgage or loan	30
Change in responsibilities at work	29
Child leaving home	29
Trouble with in-laws	29
Outstanding personal achievement	28
Spouse starts or stops work	26
Begin or end school	26
Change in living conditions	25
Revision of personal habits	24
Trouble with boss	23
Change in working hours or conditions	20
Change in residence	20
Change in schools	20
Change in recreation	19
Change in church activities	19
Change in social activities	18
Minor mortgage or loan	17
Change in sleeping habits	16
Change in number of family reunions	15
Change in eating habits	15
Vacation	13
Christmas	12
Minor violation of law	11

your personal total:

Task 1

Read through the passage on the right and identify:

- (i) The things that are causing Mike and his colleagues to be stressed at work.
- (ii) Other things that affect the degree of workplace stress they experience.

Use the cheat sheet below if you need some help.

Task 2

Link the studies below to the factors you have identified for Task 1.

- a) Shultz *et al.* (2010) gathered data from 16,000 employees across 15 European countries and found that employees who experienced work underload (as well as work overload) also experienced stress-related illness.
- b) Lazarus (1995) proposed that whether a person suffers from workplace stress is down to their perceived ability to cope with the situation in which they are placed.
- c) Johansson *et al.* (1978) found that those whose job it was to finish off furniture in a factory had a greater number of days off and more stress hormones in their urine as they were stressed from the increased responsibility of being responsible for everyone else's wages in the factory.
- d) Warr *et al.* (1987) put forward the idea that workplace stress may contribute to poor mental health but there may be other factors as well such as experiencing stressful life events.
- e) Marmot *et al.* (1997) found a link between low control and CHD, i.e. if other people make decisions for you at work, you are more likely to become ill.
- f) Schaubroeck *et al.* (2001) found that some participants who experienced low control experienced higher immune system responses when their saliva was assessed. This suggests that having more control could do the opposite – make the immune system worse and increase vulnerability to illness.



Mike was suffering due to getting increasingly stressed about his job at Burger World. He decided that enough was enough and that he should go and see Marmot and his colleagues who apparently had the answer to his workplace stress. They suggested that his stress

was down to the fact that his enjoyment of his job was influenced primarily by the decisions made by those who occupied higher positions in the organisation than he did. The fact that he had no influence on these decisions made him stressed out. For example, his boss decided that it would be a good idea for all staff to work half an hour after their shift had ended even though they would not get paid for the time. This made him and his colleagues upset as they felt the request was unreasonable but just had to put up with it because they was nothing they could do.

Marmot and his colleagues also said that Mike had too many duties to take care of and this was also a contributing factor to his stress. For example, he had to work on the till, supervise the preparation of the burgers and make sure the drive-thru ran smoothly. Mike disagreed with this point though as he found that he did not mind this aspect of the job. His friend Lazarus agreed with him as he said that, as long as he felt able to cope with his workload, he would be happy at work.

Mike was still unsatisfied with what was causing his stress. He decided to speak to his Swiss friend Johansson. Johansson and her colleagues over at Burger House said that perhaps there were other aspects of Mike's job that were causing him stress such as the increased responsibility he felt now because he had been made team trainer at work (he now had five stars on his badge!). Mike agreed with his point as if he did his job badly, the staff were less likely to get their bonuses so everyone lost out; Mike found the increased responsibility from this aspect of his job very demanding.

By now Mike felt a little better about things but was still not completely satisfied. For example, his German colleague Schaubroeck said to him that sometimes he seemed at his most happy and most well when others made decisions for him. For example, like when his boss helped him with things such as making the duty rota and deciding when all the staff had to go on their breaks. Mike thought about this and concluded that sometimes making his own decisions did make him less stressed but other times he was just as happy when others made decisions for him.

Mike had a better week the next week but then had an increase in his workplace anxiety again. He spoke to his German friend Schultz who told him to stop moaning as at least his massive workload made his time at work go quickly. Schultz worked at Pizza Land and was so bored at work as they hardly got any customers! He would spend most of his days staring at the clock waiting for his shift to end.

Mike was feeling a lot better about things in the following few weeks now that he knew the causes of his workplace stress. However, there was still one thing that kept annoying him. Sometimes his work could be going well but he still felt rundown. His friend Warr said that work was just one part of his life and perhaps he should consider that there were other things going on outside work that could be making him feel this way. Mike reflected that things with his girlfriend were not as great as they could have been and their noisy neighbours keeping them up at night playing loud music were not helping things either!

Mike saw Marmot again a few months later and thanked him for his help but also made it clear that, although Marmot's initial suggestions helped him identify some of his workplace stressors, they were not the only reasons contributing to him being a work stress-head. Marmot admitted that he had been working in the same job for many years and perhaps his knowledge of other people's work might be lacking a little bit!

Cheat sheet

Find examples of the following sources of stress in the above passage:

- Low control
- High demand through increased responsibility
- Increased control
- Work underload
- Coping ability
- External factors aside from workplace stress

INVESTIGATING THE LINK BETWEEN LIFE CHANGES AND ILLNESS

You will carry out an investigation to find out if there is a relationship between the amount of stress in people's lives and how ill they become. You will give ten people copies of the SRRS to find out how stressed they have been over the last 12 months. You will also give them an illness questionnaire that you will devise.

Part 1

Design a questionnaire to quantify the amount of illness a person has experienced over the last 12 months. Do this by completing the following steps:

1. Make a list of illnesses (these should be a mixture of stress-related illnesses and general illnesses).
2. Assign each illness a score in terms of its severity.
3. Include a box on your questionnaire that participants can tick if they have had the illness more than once in the last 12 months.
4. Make sure that your questionnaire has clear standardised instructions at the start.
5. Make sure that you include an informed consent form where you explain what will happen to them in the study and also outline their rights by referring them to the relevant applicable ethical guidelines. Try to make the consent form **125 words long** and make sure there is a space at the bottom for them to sign.
6. Write debrief instructions.

Data collection: Ask ten students (aged over 16) to fill out your **illness questionnaire** and the **SRRS** (so they fill out two questionnaires in total). With the SRRS, tell them to tick any event they have experienced in **the last 12 months**.

Part 2

Complete questions 1–10 on the *Carrying out Psychological investigations* handout (0.1).

Part 3

Results and data analysis

- Score the stress questionnaire for each of the ten participants by adding up the LCU scores next to the numbers circled for each item on the SRRS so that each participant has a total score that represents the amount of stress they have experienced in the last 12 months.
- Score the illness questionnaire for each of the ten participants by adding up the scores next to the illnesses they have ticked on the questionnaire so that each participant has a total score that represents the amount of illness they have experienced in the last 12 months.

Fill the table below with your data and rank the scores (see p 78 of the textbook for details about how to do this).

Participant number	LCU score (from SRRS)	Illness score	Hassles rank score	Illness rank score
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

To determine if your result is significant:

- Eyeball the data: draw a scattergram. (Make sure you label the graph and give it a title.)
- Identify two reasons why the Spearman's test is the most appropriate test to use when analysing the results of this investigation.
- Calculate a value for Spearman's rho (see page 78) or use an online version of the test.
- Find the critical value and state whether your results are significant at the 5% level.
- Draw at least one conclusion from the results of your investigation.

Part 4

Complete the discussion questions (numbers 17–21) on the *Carrying out Psychological investigations* handout (0.1)

Extension Write a 150-word abstract describing your study.



- Complete the Jung Typology questionnaire found at the following link to find out your four-letter personality type: <http://www.humanmetrics.com/cgi-win/jtypes2.asp>
- Type the four-letter code (e.g. ESFJ) it gives you at the end into Google and then click the first link in order to get an in-depth description of your personality.
- From the profile you are given, identify at least two characteristics that you think would make you more vulnerable to the negative effects of stress and at least two characteristics that would make you less vulnerable.
- Share these with the rest of your class. Explain your reasoning in each case.

Follow up questions

1. What are the problems associated with using questionnaires like this to measure personality?
2. Explain how using an interview could be a more effective way of measuring personality.
3. Identify ethical issues surrounding the use of questionnaires to investigate the link between personality and stress and suggest ways in which these could be dealt with.

Extension:

Look up the difference between Type A, Type B and Type C personality in your textbook.

Complete the score column of the following questionnaire to find out whether you have a Type A, B or C personality. Answer the following questions with a score from the scale below.

③ strongly agree ② agree ① disagree ④ strongly disagree

Question	Score	Personality type and specific characteristic that the question relates to
1) I do not get annoyed by people or things that others tend to find annoying.		
2) I get stressed if I have to wait for something.		
3) I believe that it is not the winning that is important but the taking part.		
4) I always want to win when competing in activities against other people.		
5) I tend to go along with things even if I don't believe they are the right thing to do.		
6) I tend to be more unhappy than happy most of the time.		
7) I am happy to wait for things that I want.		
8) If people upset me, I do not hold back my emotions and am happy to tell them how I feel, even if it means upsetting them.		
9) I am not very good at telling others what I actually want.		
10) I am not bothered if I do not get things done – there is always tomorrow.		
11) Happiness in life is about achieving the personal goals you set yourself.		
12) I do not care if I do not have a brilliant career in life as long as I am happy.		
13) When I do something, I am only happy if it is perfect.		
14) When leading on a task, I prefer to tell others what to do and do not allow others to question the orders I give them.		
15) I tend to prefer my own company to that of other people.		
16) I very rarely let others know how I really feel.		
17) I get frustrated if something I am doing takes longer than expected to complete.		
18) I very rarely get upset with other people.		

My personality type is: _____

1

Identify which characteristic of the personality types each question relates to by filling in the right-hand column of the questionnaire. Use the personality descriptions below to help you:

E.g. Question 4 relates to the *competitiveness* characteristic of Type A personality.

Type A personalities are said to be more vulnerable to stress-related illness as they tend to be 'highly strung'. They are **competitive, ambitious, impatient, hostile, intolerant of others** and have a **strong sense of time urgency** (i.e. they set time limits on tasks they have to do).

Type B personalities have the opposite characteristics to Type As and are said to be less vulnerable to stress-related illness as a result. They tend to be **non-competitive, unambitious, patient, relaxed, tolerant** and have **no sense of urgency**.

Type C personalities are not assertive by nature so they don't stand up for themselves. They are compliant, as they tend to go along with things even if they do not agree with them. They also often suppress their true emotions about things. They tend to be shy and **introverted** and are also prone to **perfectionist tendencies**. In addition, they are more likely to suffer from **stress** and **depression**.

2

Write three more questions (one for each personality type) that you could ask people in order to work out which of the three personality types they have.

3

Extension activity

Explain why the information about the three personality types was not put at the top of the questionnaire.



Complete the score column in the following questionnaire to find out whether you have a hardy personality. Answer the following questions with a score from the scale below.

③ strongly agree ② agree ① disagree ④ strongly disagree

Question	Score	Specific hardiness component question relates to
1) I work in a job that requires me to put in far more hours than I am expected to on a weekly basis.		
2) I like to have an input in all areas of my life that I care about.		
3) I enjoy starting a new part of my life (e.g. a new job)		
4) I don't like it when other people take the lead on activities that I am involved in.		
5) I will try my best at difficult activities even if I find them stressful.		
6) I wake up early every morning looking forward to the day ahead.		
7) I do not believe that my life is guided by a higher power.		
8) Taking the easy option in life leads to being unfulfilled.		
9) I feel that stressful situations make you a stronger person.		
10) I like to be around my friends and family as much as possible.		
11) I believe that one person can really make a difference to the lives of others.		
12) I try my best to resolve any problems I have in my life.		
13) I agree with the saying that 'life is like a box of chocolates, you don't know what you are going to get'.		
14) The success I have in life is down to me.		
15) You can learn something about yourself from every experience that you have.		
16) I do not view life as boring.		
17) I don't tend to view change with suspicion.		
18) I do not believe in fate.		

My hardiness score is: _____ . This suggests that I have a _____ resistance to stress.

1

Identify which component (control, commitment or challenge) of hardiness each question relates to by filling in the right-hand column of the questionnaire. Use the descriptions below to help you.

Commitment

Hardy people are very involved in all areas of their lives. This means they throw themselves fully into what life has to offer them and they are always optimistic that they will gain something positive from the experience. They tend to prefer the company of other people rather than being on their own. They will always take on challenging activities even if they find them stressful.

Challenge

Hardy people respond to change in a unique way. They have a positive view of change and see it as a challenge rather than as a threat. They accept that life is unpredictable, but are excited and stimulated by it. They believe that they can learn from stressful situations, and this is ultimately more fulfilling than retreating into a comfortable and easy life.

Control

Hardy people have a strong conviction that they are in charge of events in their lives and that they make things happen in their life rather than life being something that happens to them. They like to take an active role in terms of influencing their environments as opposed to experiencing the feeling of life passing them by.

2

Research task

Use the Internet to look up what negative affectivity relates to. Explain how hardiness research could be criticised – refer to low negative affectivity in your answer.

3

The relationship between hardiness and stress is correlational. Explain how this is a problem.

4

Identify ethical issues that arise when using questionnaires such as these.

Personality and stress

Discuss research into personality types as individual differences in stress. (16 marks)

Type A personalities are people that tend to be 'highly strung.' They are _____, ambitious, impatient, hostile and have a strong sense of time urgency (i.e. they set time limits on tasks they have to do). These characteristics make them more vulnerable to stress-related illness. Type B personalities have the opposite characteristics, i.e: unambitious, _____.

Friedman and Rosenman (1960) investigated the link between _____ personality and _____. They _____ approximately 3000 middle-aged men in California to find out whether they had a Type A or B personality. They then studied them over _____ years to find out whether they would get CHD. They found that Type A participants were _____ as likely as Type B to develop cardiovascular problems. They concluded that having a type A personality increased the risk of getting a heart attack.

_____ against the above study comes from research by Myrtek (2001) who carried out a meta-analysis of 35 studies and found that it was just the hostility component of Type A personality that was associated with CHD. This shows that _____.

A limitation of Friedman and Rosenman's study was that it used a non-representative sample because _____. This is a problem because _____.

People with a hardiness personality have a strong sense of personal _____ in that they like to influence things that can cause them stress. They are _____ to resolving any problems in their lives and view stressful situations in a positive light by seeing them as a _____. These three qualities make them _____ to stress.

Kobassa *et al.* (1979) investigated the link between hardiness and stress-related illness. They gave 800 middle-aged business executives questionnaires on how much stress they had in their job (through giving them the SRRS), how much illness they had and whether they had a hardy personality. They found that those executives with stressful jobs who experienced less illness showed the greatest amount of _____. This suggests that having a hardy personality makes people less likely to get _____ from stress.

This research used questionnaires that could have been affected by social desirability bias. This is because _____, which is a problem because _____.

Support for the role of hardiness comes from Lifton *et al.* (2006) who found that students with high scores on hardiness were less likely to drop out of their degree courses than those with low scores. This shows that _____.

Extension Task

Write two more PEE statements evaluating the research.

Cheat Sheet

- it is not all the characteristics in Type A personality that make people vulnerable to heart disease, rather just one
- challenge
- eight and a half
- evidence
- twice
- committed
- competitive
- having a hardy personality makes people more resilient so that they can withstand stressful situations (like university courses) more effectively
- Type A
- they may have reported themselves to be less stressed than they actually were, causing the findings to lack validity
- interviewed
- ill
- the findings lack population validity as they cannot be generalised to other groups of people such as women and people of different ages
- resistant
- patient, not hostile, uncompetitive and no sense of urgency
- hardiness
- CHD
- they only used middle-aged men from California
- control
- the participants may have wanted to portray themselves in a more positive light



Task 1

Work in groups of three and prepare a series of guidance notes that a therapist could use to advise a client who came to them with **one** of the following problems:

- 1) Someone with exam stress.
- 2) Someone who is due to take their driving test.
- 3) Someone who is doing a very important job interview.
- 4) Someone who is nervous about going to the dentist.
- 5) Someone who is nervous about going into hospital for surgery.
- 6) Someone who is nervous about going on an important date.

Task 2

Choose one of the above scenarios and make sure that you comment on the following areas:

- (a) Break their global stressor into more specific manageable parts.
- (b) Summarise the negative effects of stress to your target person.
- (c) Identify at least three behavioural strategies they could carry out to reduce their stress.
- (d) Identify at least three cognitive strategies they could carry out to reduce their stress.



1. Draw a conclusion about the effects of progressive muscle relaxation on pulse rate.
2. How was physiological activity operationalised in this activity?

Use the textbook to answer these questions about biofeedback

Participant number	Pulse rate before progressive muscle relaxation	Pulse rate after progressive muscle relaxation
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
15		
Mean pulse rate		

3. Decide whether the following statements are true or false.

- (i) Biofeedback involves being connected to a machine that changes activity produced by the body into a visual or auditory signal.
- (ii) An EMG measures brain activity that is reflected on a visual display.
- (iii) Biofeedback patients can see that they have been successful at reducing their physiological arousal as the visual display they are watching stays the same.
- (iv) When being trained in biofeedback, patients are not taught to relax.
- (v) Participants receive positive reinforcement from their therapist.

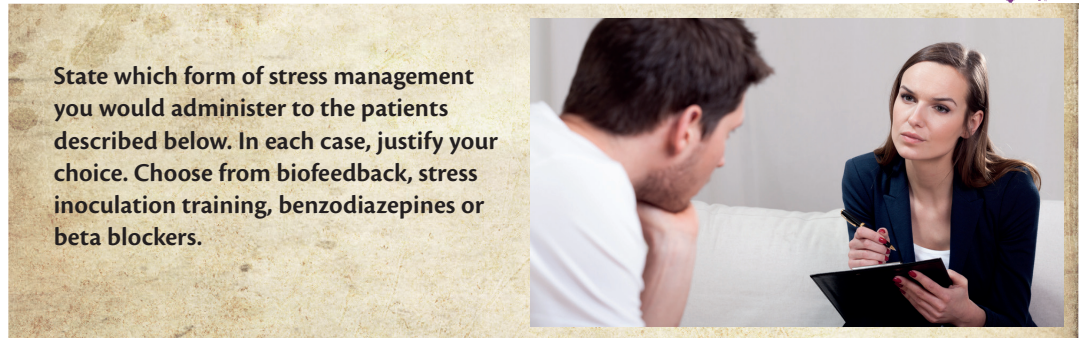
4. Why is it difficult to draw accurate conclusions about the effectiveness of biofeedback (refer to outcome measures in your answers).

5. Biofeedback traditionally involved the patient being connected up to a machine where they would be supervised by somebody else. With this in mind, why is it now a far more convenient treatment?

6. What type of person is more likely to find biofeedback useful?

Extension:

Carry out the Wilcoxon T test to find out if there is a significant difference between the pulse rates before and after progressive muscle relaxation.



1. A mother has a child that is anxious. She is reluctant to give him anything that could have adverse physiological effects on him. He has a lot of spare time but is wary of investing in something that is not likely to work. Her son is a good-natured boy, but is easily bored.
Answer:

2. Leon has suffered from stress for a long time. He has tried many different approaches but none of them seems to work. Whatever he does, the same problem keeps occurring again. His girlfriend tells him that until he gets to the bottom of this problem then it will continue to re-occur.
Answer:

3. Michael has a job interview in two days and is very nervous because of it. He only has to keep himself calm for the duration of the interview that lasts for half a day. His friends have tried to calm him down by talking to him but he just won't listen – they are particularly worried about him as he has suffered from depression in the past and do not want this event to trigger another period of low mood again.
Answer:

4. A snooker player is suffering from performance related anxiety and needs to do something as it is starting to affect his game. He misses shots that he would normally pot due to not being able to hold the cue steadily enough as he is often too tense. The situation is getting desperate as he has the world championships coming up in a couple of weeks.
Answer:



For each question, write down examples of the different types of social support you could give to each person in the case study.

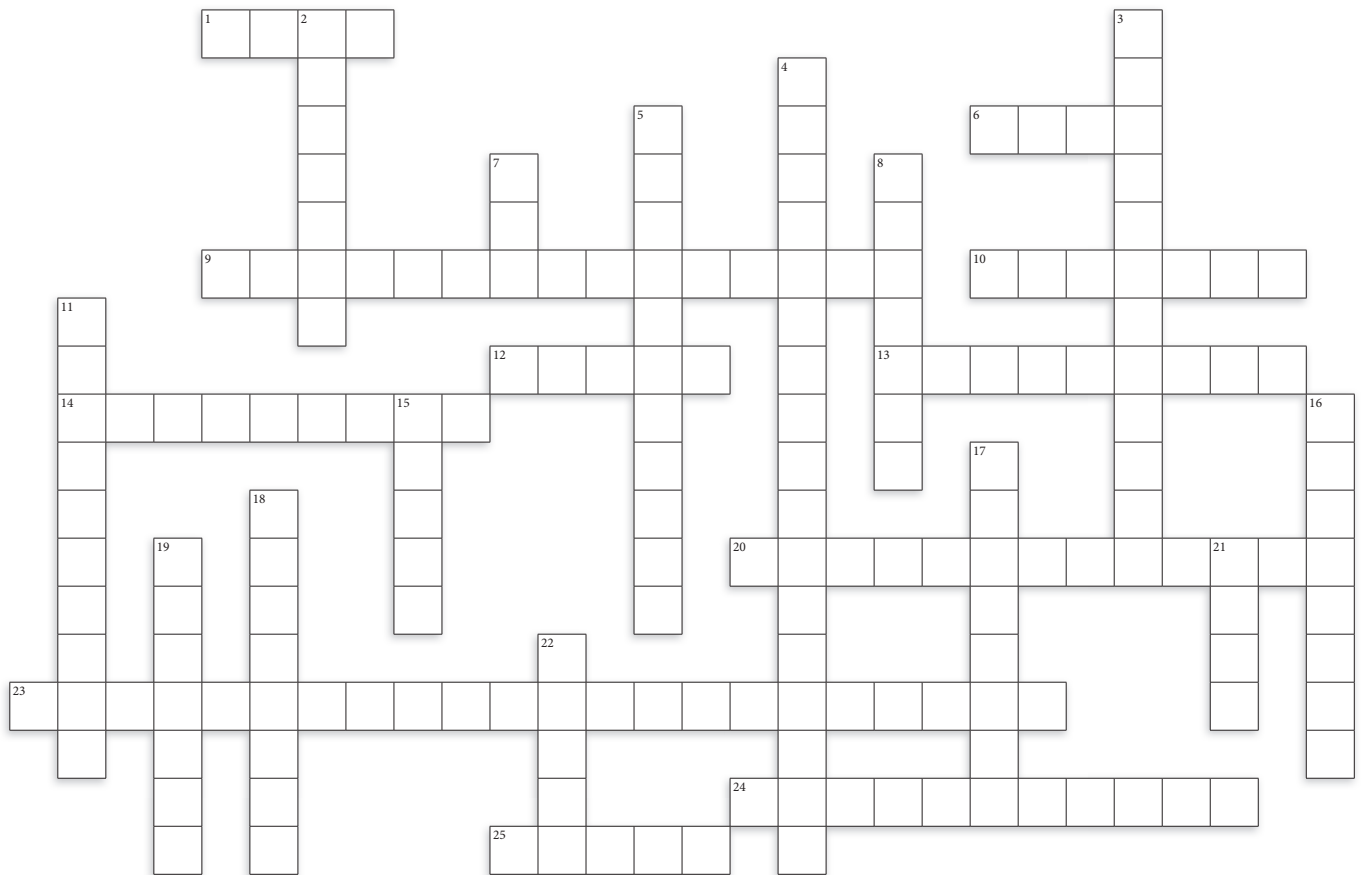
For example, *someone is stressed out because they only have one day before the tenancy on their flat expires and they don't think that they will be able to move their things out in time.*

Instrumental support: Give them a hand with moving.

Emotional support: Get them to focus on how good it will be to move into their new place.

Esteem support: Reassure them that they are very organised and so will be able to pull off the house move without a hitch.

1. Tom is anxious because he does not have enough confidence to ask somebody out even though he is very lonely and would like to find someone to settle down with.
2. Kate is anxious because she thinks she will fail all of her exams even though she has been revising a lot.
3. Sam is stressed out because she thinks she will fail her driving test even though she has had 53 lessons.
4. Ben is stressed out because he thinks he is losing his hair after looking in the mirror one day and seeing that his hair has started to thin.
5. Ellie is stressed because her partner is going away on a trip with some friends and she worries that she will not be able to keep in contact with her partner.
6. Tahir is stressed because he has to do a presentation tomorrow in class and he is worried that it won't go well.
7. David is stressed because the rash he got on his arm has not yet gone away and he is worried that it may be a sign that he is seriously unwell.
8. Amaal is anxious because she cannot work her new computer and she feels really stupid as everyone else seems to be more competent with IT than she is.
9. Tiffany is worried because her favourite pet has gone missing and she doesn't think she will ever be able to find it.
10. Ashley is stressed out because of the annoying colleague he works with who has a habit of putting him down at work.



Across

1. Life change _____ – a measure that quantifies stress by equating it to re-adjustment in life. (4 letters)
6. An acronym used to identify the scale that measures stress by equating it to readjustment in relation to life changes. (4)
9. The way in which females tend to deal with stress. (4,3,8)
10. Part of the adrenal gland linked to the SAM response. (7)
12. The personality type that relates to people who are impatient, ambitious and competitive. (4,1)
13. People with this component of the hardiness personality tend to view problems in a positive light. (9)
14. Research suggests that this is the most influential component in type A personality that leads to heart disease. (9)
20. The name given to the body's short term response to stress. (5,2,6)
23. A key problem with stress research that uses questionnaires. (6,12,4)
24. This technique finds a relationship between two variables (e.g. stress and illness) but not a cause. (11)
25. Receptors in this area of the body are blocked to prevent them being stimulated by adrenaline and noradrenaline. (5)

Down

2. The name of the system that protects us against antigens (6)
3. The type of social support that involves giving people practical support to help them with stress (12)
4. The first stage of SIT (17)
5. A therapy that involves converting a person's physiological reactions to stress into a signal they can control. (11)
7. These three letters stand for diseases of the heart and circulatory system. (3)
8. The type of students who Kiecolt-Glaser used in her 1984 study on stress and the immune system. (7)
11. The final stage of the GAS model. (10)
15. This personality type are more likely to suppress their emotions (4,1)
16. Biochemical released by the adrenal cortex in the HPAS system (8)
17. According to Wilbert-Lampen *et al.*'s (2008) research, people experienced more cardiac emergencies when watching this sport compared to times when they were not. (8)
18. Johansson *et al.*'s (1978) study found that as well as control, a high amount of this factor was responsible for stress-related illness. (8)
19. A term used to describe positive events that occur on a daily basis. (7)
21. A neurotransmitter that BZs affect which has an inhibitory effect on other neurons in the brain (4)
22. A limitation of drugs is that they treat the symptoms of stress but not the underlying _____. (5)