

Physiological Psychology

- **Body's response to stressors; GAS**
- **Stress and cardiovascular disorders (Research)**
- **Stress and the immune system (Research)**
- **Life changes, Workplace stress (Research)**
- **Personality and Gender – roles in modifying stress**
- **Physiological and Psychological methods of stress management**

Stress Management - Methods

- **Drugs: anxiolytics, beta-blockers, ACE-inhibitors**
- **Biofeedback**
- **Meditation, muscle relaxation**
- **Cognitive-behavioural approaches**
- **Physical exercise**
- **Social support**

Does Stress Have to be Managed ?

- **Stress can arousing and motivating; you work (in theory.....) to reduce the stress in your life**
- **Life is ALWAYS stressful at some level**
- **Coping with stress increases the sense of self-control and ability to manage your life**
- **BUT: sometimes it all gets too much.....or physical symptoms develop even if you don't feel too stressed**

Physiological or Psychological ?

- Drugs are definitely **physiological**
- Biofeedback can be **either** - usually **physiological**, but can emphasise **psychological aspects - relaxation, imagery**
- SIT, Hardiness training, **psychological**
- Progressive muscle relaxation - **either, but usually seen as psychological**
- Meditation - **psychological**

Drugs

- **Benzodiazepines (BZs); e.g. librium, valium.** Act in brain on GABA systems which then reduce serotonin activity
- **Beta blockers; e.g. inderal.** Act on the peripheral nervous system to reduce e.g. heart rate and blood pressure
- **Antidepressants; e.g. prozac.** Act in brain on serotonin mechanisms, useful in only some stress-related conditions e.g. social anxiety

Drugs Effects

- **BZs used as standard treatment for generalised anxiety and stress-related anxiety.**
- **Beta blockers used for rapid control of life-threatening hypertension**
- **All drug groups can be useful for social anxiety (phobia) ...Figueira, 2002**

Drugs - 3 and 6 AO1 marks

- ‘Drugs include benzodiazepines (BZs) and beta blockers. BZs act in the brain (on GABA systems) to reduce serotonin activity, which reduces anxiety and stress. Beta blockers act on the body to directly reduce heart rate and blood pressure which can be increased by stress. Drugs should only be used in the short term and combined with psychological approaches.’

Drugs - strengths and weaknesses

- ‘Drugs can be used to control stress-related effects in the short term. They can act quickly on the brain and body and directly target the physiological effects of stress.’
- ‘Drugs only target the symptoms of stress and not the causes. This means that stress may return when treatment ends. Drug therapy should be combined with psychological approaches which target the causes of stress.’

Drugs

- Side effects
- Physical dependence (benzodiazepines)
- Psychological dependence
- Treating symptoms only
- BUT: can be effective quickly against life-threatening conditions
- Useful in combination with psychological therapies

Biofeedback - 3 and 6 marks

- ‘Biofeedback involves the **RECORDING** of the body’s physiological responses to stress using electrodes. Heart rate, **BLOOD PRESSURE**, and muscle tension can be recorded and **DISPLAYED** on a monitor. The client is then trained to use **RELAXATION** and imagery to **REDUCE** these measures of stress. Once trained, they can use these techniques to control their stress responses.’

Biofeedback - Strengths and Weaknesses

- ‘Biofeedback trains the person to control their stress responses. Training in relaxation improves their sense of being in control and they can transfer this control to other situations.’
- ‘Although it has been shown to work with some groups such as children, biofeedback is not always effective and often it is no better than training in relaxation techniques on their own.’

Biofeedback

- Equipment-dependent
- Needs training and practice
- May not be superior to relaxation etc alone
- May be effective for some groups e.g. children

Meditation

- Reduces physiological arousal
- Improves mood and sense of control
- Easy to learn
- Effects disappear rapidly unless used regularly; becomes part of self-image

Cognitive-Behavioural Therapy

- Identify and analyse sources of stress
- Analyse previous coping attempts - successes and failures
- Skills acquisition and rehearsal
- Application in the real world
- Continuous review of success and failure
- (Meichenbaum, Stress-Inoculation therapy)

Question (a) (i) Outline *one* psychological method of stress management (3 marks)

- 3 marks, 3 mins. Use *name, explain, example*: e.g. Stress inoculation training....
- 1. Identify and assess sources of stress with therapist e.g. examinations
- 2. Train in relaxation and specific skills e.g. time management
- 3. Apply in the real world, additional training if necessary

Question (a) (ii) Outline *one* strength of the psychological method of stress management you have outlined in (i). (3 marks)

- Only *one* asked for; DO NOT LIST SEVERAL – only one will be marked
- *Name, Explain, Example*
- ‘One strength of SIT is that it gives skills in coping with sources of stress in the future. For example, training in coping with exams, such as time management will last for a long time and will reduce stress in the long term.’

SIT/IH - Strengths and weaknesses

- ‘SIT identifies the causes of stress by analysing previous stressful situations, and provides specific skills to reduce their effects and increase the sense of being in control.’
- ‘SIT takes a long time with a therapist and so requires motivation and persistence. This means it is not suitable for all people.’

Physical Exercise

- Cardiovascular fitness
- Raises mood
- Improves self-esteem: sense of control
- Time consuming
- Health risks, not minimal....joint and muscle injuries, death
- Can be effective in reducing stress - Throne et al., 2000; exercise reduces stress-related arousal in firefighters

AO2 - Analysis and Commentary

- ‘2 Physiological or 2 Psychological Approaches’
- Use specific strengths and weaknesses
- Compare - e.g. speed (drugs better than SIT), targeting symptoms, not causes (drugs, biofeedback versus SIT), long term management (drugs v. SIT), side effects (drugs v. SIT)
- Overall - combinations - drugs to manage symptoms, SIT to produce long term change

AO2 - Effectiveness

- Use of examples very rare..
- Attanasio et al., 1985: biofeedback effective in children to control tension headaches.
- Meuret et al., 2004: respiratory biofeedback effective in panic disorder patients.
- Drugs established as effective treatments for stress-related anxiety and controlling hypertension e.g. Van der Linden et al., 2000; SSRI's (prozac) effective against Social Anxiety

AO2 - Effectiveness

- Meichenbaum, 1977: SIT effective in treating snake phobias, effect generalised to other phobias and stressful situations
- Fontana, 1999; Berger, 2000; Sheey, 2000: CBT/SIT effective in reducing stress in College students
- Holroyd et al., 2001: drug therapy and CBT effective alone and in combination against tension headaches; drug effect faster than CBT

AO2 - Commentary

- Refer to other approaches and important issues e.g. meditation, muscle relaxation, exercise - individual choices
- Refer to individual differences (may affect choice of method) - Type A vulnerability, hardy personality, gender differences (link to effective use of social support)

Time Management

- Roughly *one* mark per minute; sections (a) and (b) should take about 5-6 mins
- Section (c) 15-18 mins; 5-6 mins AO1, 10-12 mins for AO2
- Read the Questions CAREFULLY: make sure students access AO2 marks
- Practice writing for 5 mins.....

Question (b) Outline findings of research (theories *and/or* studies) into workplace stressors. (6 marks)

- FINDINGS !!!!! 5-6 mins
- 1/2 Studies in detail (e.g. Johansson/Marmot)
- 3/4 in less detail
- If using noise, temperature, control, crowding etc, MAKE THEM RELEVANT TO THE WORKPLACE; otherwise NO CREDIT
- Range of stressors acceptable as part of THEORY; use 'research has shown.....'

APFCC Studies

- Stress and cardiovascular disorders
- Stress and the immune system
- Life changes as a source of stress
- Study of workplace stress
- *Questions very specific; two sections do not have to be perfectly balanced*
- *APFCCs are MULTIPURPOSE: use in 'Outline research findings', and in section c's*

Section (c)..... AO2

- Evaluation of specific studies – 2/3 points made relevant better than 5/6 points just mentioned
- Evaluation of theories/approaches – contribution to the area, particular strengths/weaknesses
- General commentary/conclusions – many workplace stressors, gender/personality often ignored, psychological v physiological SM etc

Question (c) Outline and evaluate research (theories and/or studies) into life changes as a source of stress. (18 marks)

- 6 AO1 marks, 12 AO2 marks: get balance right
 - Life Changes: AO1
1. Development of the Life Changes scale (SRRS)
 2. Use in research: USA Navy study etc
 3. Developments (Sarason etc)

AO2 Material

- **Evaluate specific studies:**

Naval study – all men, sailors (why is this an issue?); significant but low correlation (0.118)

- **Evaluate the approach:**

Use of questionnaires (demand characteristics, memory), ignores individual differences, weak support for link with illness, stimulated work on life events, stress, and illness

AO2 Material

- **General Commentary:**

Stress/illness link affected by personality, gender, etc.

Daily Hassles scale correlates better with some stress measures – conclusion? **BUT: use hassles as AO2; it is NOT AO1**

Many sources of stress – hassles, workplace, control etc; unrealistic to measure only one?

BUT: major life events can lead to stress-related illness; bereavement, Christmas etc – BE POSITIVE

Conclusions

- **Know APFCC studies – good background to the rest**
- **For key areas know 2 other studies in outline, especially findings/conclusions**
- **Work on AO2 for the ‘regular’ part (c) questions**
- **Don’t get bogged down in physiology: e.g. GAS; two brief points for each stage = 6 marks.**

Regular Problems – Physiological Psychology

- **Biology of arousal/stress response**
- **What studies where ? e.g. Brady’s monkeys (stress, control and illness, NOT heart disease/immune system)**
- **Organisation of AO2 – answer question.....**
- **Methods of Stress management; know 1 or 2 studies of effectiveness, especially for psychological methods e.g. studies show that cognitive SM reduces blood pressure, angina, cholesterol (Johnston et al, 1986; Gill et al., 1985; Gallacher et al., 1997)**
