



TASK 6
YEAR 12 ATAR PSYCHOLOGY
UNIT 4
RESPONSE TEST

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Syllabus points

- Applications of Psychology to Health: stress as defined by Selye (1936), models of stress, health related consequences of stress – maladaptive and adaptive coping strategies
- Science Inquiry: Ethical guidelines and practices for psychological research, Formulating research, Methodology, Processing and analysing data.

Conditions

- Reading time: 5 minutes
- Working time: 50 minutes

Task Weighting

- 8% total weighting

Structure of this paper

| Section | Number of questions available | Number of questions to be attempted | Suggested working time (minutes) | Marks | Score |
|-----------------------------------|-------------------------------|-------------------------------------|----------------------------------|-------|-------|
| Section One: Short Answer | 2 | 2 | 35 | 33 | |
| Section Two: Extended Response | 1 | 1 | 15 | 16 | |
| Total | | | | 49 | |

Section One: Short Answer Response

(33 Marks)

This section has two questions. Write your answers in the spaces provided.
Suggested working time: 35 minutes.

Question One

(13 marks)

Mrs Lee and her Psychology class wanted to test their theory that different types of meditation techniques would improve stress levels before exams. The class collected participants from their own school; Year 7's, Year 9's, Year 11's, and Year 12's. The participants were aged between 11 and 18 years old and were randomly allocated into three groups. Group 1 practices mindfulness once a day and group 2 practice Mantra meditation once a day (a practice that involves repeating a word, phrase, or sound to bring about mental focus and clarity). Group 3 practiced no meditation beyond their normal daily routine. At the end of a two-month trial, a week before the exam period, all the participants completed a stress test.

The following results were collected:

| | Mean Score on Stress Test (out of 100) |
|----------------------------|--|
| Group 1: Mindfulness | 57 |
| Group 2: Mantra Meditation | 65 |
| Group 3: No Meditation | 79 |

A statistical test on the difference between the effect of practicing meditation verses no meditation on stress found that $p = 0.47$

- a) Suggest a directional hypothesis that the class would have developed for this study.

(4 marks)

It is hypothesised that highschool students between 11 and 18 years old that practise a meditation technique such as practising mindfulness and mantras will have a lower result in the stress test than student who didn't ^{meaning they will have} have lower levels of stress before exams.

- b) Identify two possible sources of error in the conduction of this experiment. (2 marks)

The sample, the big age gap and their difference
importants on exams a year 7 wouldn't care as much
as a year 12. Another possible error is making
sure the participants followed the instructions

- c) Define stress as defined by Selye (1936) (2 marks)

The non-specific response of the body on
any demand (psychological or physiological)

- d) Outline what type/nature of stressor that being stressed about the upcoming exam is categorised by. (2 marks)

Psychological stressor. The stress caused by internal
ideas, values and belief. People putting stress on
themselves to get high marks

- e) Name the type of stress these students are experiencing due to exam preparation and outline what this means. (3 marks)

The type would be stress, the positive stress response
enhances and motivates. So the students study
more in order to be prepared. This could also be distress
The negative stress response encompassed by physiological and negative
emotions, if they didn't prepare

Question Two

(20 marks)

Hugh recently graduated University and was travelling to his first big job interview. Along the way he noticed his car tire had started to go flat and needed replacing. Hugh was panicked and felt instantly stressed about making it on time for the job interview. Luckily a repair shop was close by, and he managed to get it replaced almost instantly.

- a) Describe the duration of the stressor.

(1 mark)

How long stress is felt. In this case acute stress

- b) Identify the stage of stress Hugh was in when realising he had a flat tire and outline the characteristics of this stage.

(4 mark)

Hugh was in the Alarm stage. The alarm stage is the initial response to stress in which the amygdala sends messages to the hypothalamus where the adrenal gland where it releases stress hormones. Cortisol - increase blood sugar, Adrenalin: increases heart rate and Noradrenaline increases blood pressure

Hugh unfortunately did not get offered the job position, and it is now 3 months later, and he has failed to secure another interview opportunity. His financial situation has been a serious stressor of his for these past few months.

- c) Explain what may happen if Hugh is unable to resolve the stress, including both short-term and long-term impacts.

(5 marks)

If Hugh ^{doesn't} resolve his stress it could turn chronic.

Where he would be in the exhaustion stage.

Short term impacts are increased heart rate, increase blood sugar, increased blood pressure

Long term impacts are decreaseⁱⁿ cognitive

functions, decrease^{of the} in immune system,

and

in extreme cases death

Due to the prolonged stress, Hugh decides to visit a psychologist, seeking help and support in managing his stress. The psychologist decides to assess Hugh's vulnerability to stress through The Social Readjustment Scale, developed by Holmes and Rahe (1967).

- d) Name the type of self-report measure used in the Social Readjustment Scale. (1 mark)

A checklist

- e) Outline one strength and one limitation of this measurement tool. (2 marks)

Strength is that it's quantitative data being able to measure.

A limitation is that it's subjective one person could feel stress on one thing but another isn't

- f) Using Lazarus and Folkman's (1984) theory, outline the role of the following cognitive appraisals and apply them to Hugh. (4 mark)

Primary: initial appraisal to assess whether the situation is harmful, positive or ~~not~~ not important.

Hugh has identified his stress as harmful

Secondary: looking for available resources to ^{cope} deal with the harmful stress. Hugh ~~is~~ deciding to see a psychologist

- g) Explain the method of coping Hugh is using in the scenario. (3 mark)

Hugh is using Adaptive, problem focused base coping. Adaptive being good ^{coping ways} and problem focused to end the stress by going out to find a ~~situation~~ solution. So he went and found a psyc' psychologist for help

Section Two: Extended Response

(16 Marks)

This section has **one** question. Write your answers in the spaces provided.

Suggested working time: 15 minutes.

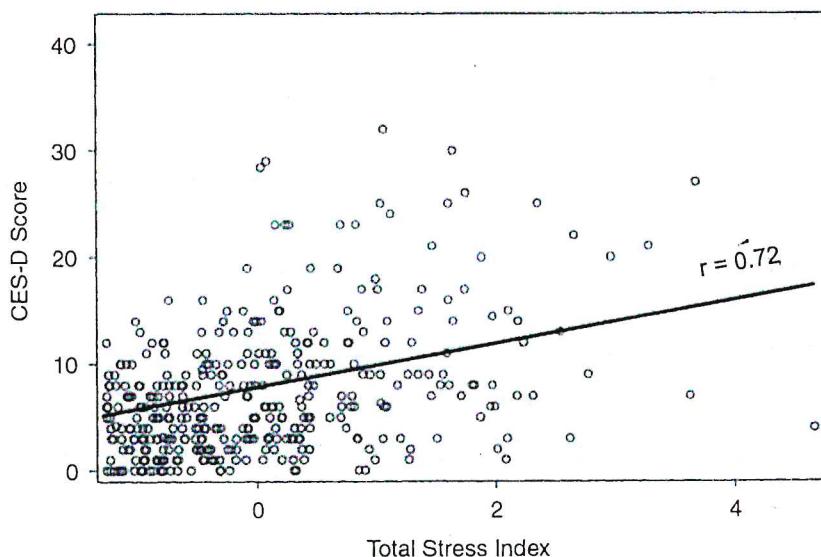
Question three

(16 marks)

Psychology students at Harvard University investigated the relationship between **occupational stress** and **depressive symptoms among coal miners**. The participants were **364 coal miners from Ohio, America**. The study was approved by the internal review board of Harvard University.

A total stress index score was calculated for each miner to measure the level of stress they experience as part of their occupation. The Centre for Epidemiologic Studies Depression (CES-D) scale was used. It contains 20 item that are self-rated on a four-point Likert scale according to how often each symptom occurred in the past week. The sum of the scores represents the overall (CES-D) score between 0 to 60. A score of greater than 16 is considered indicative of depression. The scatterplot below shows the results for the study.

Figure 1: predicted mean CES-D score by miner's stress index



Notes: Adjusted for age, sex, race/ethnicity, alcohol intake and smoking status.

In a series of questionnaires used to gather qualitative data, the miner's reported threat of harm (intentional and unintentional), excessive work in hard conditions and a lack of support from supervisors as their three main stressors.

In your answer, refer to the above scenario by creating a well-constructed response, addressing the following:

- Outline what stress is according to Lazarus and Folkman (1984) and identify two types of stressors that the miner's experience in their work. (4 marks)
- The university's Internal Review Board is an example of an ethics committee. Describe the role of an ethics committee and outline two ethical guidelines that this committee would monitor during the study, stating how this would occur. (6 marks)
- Based on the data illustrated in Figure 1 on page 24, comment on the relationship between stress and depressive symptoms. (4 marks)
- Describe how psychological stress arises according to Lazarus and Folkman (1984) (2 marks)

Question number: _____

Lazarus and Folkman stress is the as a transaction. Stress is the specific response to a stimuli. One type of stressor the miner will experience is environmental, the stress caused by external stimuli, since due to them working in mines, fight spares and caves that can collapse. Another stressor the will experience is psychological, due to the nature of their work they could be putting stress on themselves to perform better.

The role of an ethic committee is to make sure that ~~partic~~ experiment is ethical and the participants won't be harmed in any way. One ethical guideline they could consider is protection from harm, making sure that the miners are safe ~~phys~~ physically and psychologically. Another ethical guideline is voluntary participation that the miners participating chose to on their own ~~to~~ will.

Question number: _____

The date shows to be linear and has ^{strong} a positive association with 0.72. Meaning that as total stress index increases so does the CES-D scores. Therefore the more stress a individual is the more likely they will have ~~be~~ higher depressive symptoms.

Psychological stress arises through cognitive appraisals, the subjective appraisal for ~~an~~ a stimuli, in which where it goes to primary and secondary appraisal. In secondary appraisal available resources are evaluated, but if ~~then~~ no resources then the stress will be ongoing in which where the brain ~~is~~ sees no hope

Question number: _____

Question number: _____

END OF TEST