

A-level PSYCHOLOGY (SPECIFICATION A)

Unit 4 Psychopathology, Psychology in Action and Research Methods

Tuesday 14 June 2016

Morning

Time allowed: 2 hours

Materials

For this paper you must have:

• an AQA 16-page answer book.

Instructions

- Use black ink or black ball-point pen.
- Write the information required on the front of your answer book. The Paper Reference is PSYA4.
- In **Section A**, choose **one** topic.
 - Where appropriate, refer to theories and/or studies.
- In Section B, choose one topic. Answer all questions on the topic you choose.
 Where appropriate, refer to theories and/or studies.
- In **Section C**, you should answer **all** questions.
- Do all rough work in your answer book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 83.
- In Section A and in Section B, you will be marked on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

Section A Psychopathology

Choose one topic from Section A.

Each topic carries 24 marks.

Where appropriate, refer to theories and/or studies.

Topic: So	chizophrenia	
0 1	Outline and evaluate one or more biological therapies for schizop	ohrenia. [8 marks + 16 marks]
Topic: D	epression	
0 2	Outline and evaluate one or more psychological explanations for	depression. [8 marks + 16 marks]
Topic: Pl	nobic Disorders	
0 3	Outline and evaluate two explanations for phobia.	[8 marks + 16 marks]
Topic: O	bsessive Compulsive Disorder	
0 4	Outline and evaluate two explanations for obsessive compulsive of	disorder. [8 marks + 16 marks]

Section B Psychology in Action

Choose **one** topic from **Section B**. Answer **all** questions on the topic you choose.

Each topic carries 24 marks.

Where appropriate, refer to theories and/or studies.

Topic: Media Psychology

A television company planned to produce a range of children's television programmes. The company wanted to develop programmes that had the best chance of promoting prosocial behaviours in the children who watch them. The company needed to decide on the types of programmes to produce, the kinds of characters to create and the behaviours displayed by these characters.

Using your knowledge of psychological research into media influences on prosocial behaviour, what advice would you offer this television company to help them produce their children's programmes?

[10 marks]

Outline how the Hovland-Yale Model explains the persuasive effects of television advertising.

[4 marks]

0 7 Discuss **one or more** evolutionary explanations of the attraction of celebrity.

[4 marks + 6 marks]

Section B continues on the next page

Topic: The Psychology of Addictive Behaviour

As a teenager Tony developed major interests in rock music and films and often dreamed of being a rock or film star. He also started to watch more and more television and now he usually spends several hours a day watching television programmes.

In his teens Tony became a heavy smoker, preferring the famous brands smoked by his idols. He also began to develop a gambling addiction. This started when he would regularly buy lottery scratch cards with any spare cash that he had.

Tony ended up heavily in debt and struggled with these addictions for several years. Recently, Tony has shown the first signs of turning his life around. He has shown some success with giving up smoking and has just completed a whole month without smoking at all. However, he has not yet had much success with reducing his gambling habit.

Using your knowledge of media influences on addiction, explain how the media may have influenced the initiation, maintenance and/or reduction of Tony's addictive behaviours.

[10 marks]

- 0 9 Outline the biological approach to explaining the initiation of a smoking addiction.

 [4 marks]
- Outline **one** psychological intervention for reducing addictive behaviour. Evaluate the effectiveness of this intervention for reducing addictive behaviour.

[4 marks + 6 marks]

Topic: Anomalistic Psychology

Although not a believer in parapsychology, Margaret volunteered to play the part of receiver in an experiment on ESP. She was seated in a comfortable chair in the experimental room and given headphones to wear to eliminate background noise. Halved ping-pong balls were placed over her eyes, which had a red light shone on them. In the room next door the experimenter asked a 'sender' to select a target image from a choice of four and attempt to transmit this image mentally to Margaret.

Margaret was then removed from her state of sensory deprivation. The experimenter handed copies of the four images to her. She was asked to select which of these four images most resembled the target image that had been transmitted to her. Over several trials Margaret scored well above chance. The researchers concluded that their study provided evidence for the existence of ESP.

Use your knowledge of methodological problems in paranormal cognition to explain why the researchers' conclusion might not be justified. Explain how a researcher might address these problems.

[10 marks]

Outline and evaluate one explanation for superstitious behaviour.

[4 marks + 6 marks]

Outline findings of research into near death experiences.

[4 marks]

Turn over for Section C

Section C Psychological Research and Scientific Method

Answer **all** questions in this section.

This topic carries 35 marks.

Topic: Psychological Research and Scientific Method

Read this information very carefully as you will need to refer to it in later questions.

An investigation was set up to test the effectiveness of a new anxiety management programme for school students. A small-scale investigation was carried out before the main study took place. This was used to check the appropriateness of the questionnaire used to measure anxiety. Twenty-three students of both sexes and aged 15–16 took part in this.

At the start of the small-scale investigation an anxiety score was obtained for each student. This score was based on a 20-item questionnaire designed by a team of psychologists working at a local university. The higher the score obtained, the greater the level of anxiety. This was followed by a 6-week programme of anxiety management involving weekly 30-minute sessions for all the students. After the programme had ended, a second anxiety score was obtained for each student using the same questionnaire.

1 4	State a directional hypothesis for this small-scale investigation.	[2 marks]
1 5	The researchers needed consent from parents/guardians for their children to take part in the investigation. Design a consent form that might have been given to parents/guardians asking for permission for their child to take part.	
		[5 marks]
1 6	The researchers wanted to establish the reliability and internal validity of their questionnaire. What is meant by the terms reliability and internal validity ?	[2 marks]
1 7	How might the researchers have checked the internal validity of their questions	naire? [3 marks]
1 8	The researchers chose to use a one-tailed test to analyse their data. Give one for this choice.	e reason
	ioi tiis choice.	[1 mark]

A Wilcoxon Matched Pairs Signed Ranks Test was used to test for the significance of the difference between the anxiety scores at the start of the programme and after the programme had ended. No student's score remained the same. The calculated value of T was found to be 63.

Table 1: Critical (table) values of T

Level of significance for a one-tailed test				
N	0.05	0.01	0.005	
21	67	58	42	
22	75	65	48	
23	83	73	54	
24	91	81	61	
25	100	89	68	

Values of T that are equal to or less than the tabled value, are significant at or beyond the level indicated.

1 9 Using **Table 1** above, explain whether or not the results of the study are significant at the 5% level.

[3 marks]

When the main study was undertaken, 40 students were allocated randomly either to receive the 6-week anxiety reduction programme or to a control group which did not. The questionnaire was used to measure the anxiety levels of each student at the start and at the end of the 6-week programme. The change in each student's anxiety score was calculated for this period. The researchers found that the students who took part in the anxiety reduction programme showed a significant decrease in their anxiety scores compared with the control group.

2 0 Explain why a control group of students was necessary for the main study described above.

[3 marks]

2 1 Explain why participants were allocated randomly to the two conditions. How might the students have been allocated randomly to the two conditions?

[2 marks + 2 marks]

Section C continues on the next page

Table 2: Median reduction in anxiety scores and ranges for all participants

	Median reduction in anxiety score	Range
Experimental group	12	16
Control group	2	5

2 2	Sketch a suitably labelled graph to illustrate how the data for both groups of students might be presented.	
	[4 marks]	
2 3	What statistical test would you use to analyse the results from the main study? Give three reasons for your choice of test.	
	[4 marks]	
2 4	The researchers had considered using a matched pairs design in their study. What is meant by the term 'matched pairs design'? How might a matched pairs design have been implemented for this investigation?	
	[2 marks + 2 marks]	

END OF QUESTIONS

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