Please check the examination details below before entering your candidate information

Candidate surname	Other names
StemUp Model Solution	

Centre Number | Candidate Number

Pearson Edexcel International Advanced Level

Tuesday 28 May 2024

Morning (Time: 1 hour 30 minutes)

Paper reference **WPS03/01**

Psychology

International Advanced Level

UNIT 3: Applications of Psychology

You do not need any other materials.

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **ALL** questions in Section A, and **ALL** questions from **EITHER** Option 1 criminological psychology **OR** Option 2 health psychology.
- Answer the questions in the spaces provided
  – *there may be more space than you need.*

Information

- The total mark for this paper is 64.
- The marks for **each** question are shown in brackets
  – *use this as a guide as to how much time to spend on each question.*
- The list of formulae and statistical tables are printed at the start of this paper.
- Candidates may use a calculator.

Advice

- Read each question carefully before you start to answer it.
- Check your answers if you have time at the end.

Turn over ▶

P75833RA

©2024 Pearson Education Ltd.

F:1/1/1/1/1/

P 7 5 8 3 3 R A 0 1 4 0

Pearson

FORMULAE AND STATISTICAL TABLES

Standard deviation (sample estimate)

$$\sqrt{\left(\frac{\sum(x-\bar{x})^2}{n-1}\right)}$$

Spearman's rank correlation coefficient

$$1-\frac{6\sum d^2}{n(n^2-1)}$$

Critical values for Spearman's rank

	Level of significance for a one-tailed test				
	0.05	**0.025**	**0.01**	**0.005**	**0.0025**
	Level of significance for a two-tailed test				
N	**0.10**	**0.05**	**0.025**	**0.01**	**0.005**
5	0.900	1.000	1.000	1.000	1.000
6	0.829	0.886	0.943	1.000	1.000
7	0.714	0.786	0.893	0.929	0.964
8	0.643	0.738	0.833	0.881	0.905
9	0.600	0.700	0.783	0.833	0.867
10	0.564	0.648	0.745	0.794	0.830
11	0.536	0.618	0.709	0.755	0.800
12	0.503	0.587	0.678	0.727	0.769
13	0.484	0.560	0.648	0.703	0.747
14	0.464	0.538	0.626	0.679	0.723
15	0.446	0.521	0.604	0.654	0.700
16	0.429	0.503	0.582	0.635	0.679
17	0.414	0.485	0.566	0.615	0.662
18	0.401	0.472	0.550	0.600	0.643
19	0.391	0.460	0.535	0.584	0.628
20	0.380	0.447	0.520	0.570	0.612
21	0.370	0.435	0.508	0.556	0.599
22	0.361	0.425	0.496	0.544	0.586
23	0.353	0.415	0.486	0.532	0.573
24	0.344	0.406	0.476	0.521	0.562
25	0.337	0.398	0.466	0.511	0.551
26	0.331	0.390	0.457	0.501	0.541
27	0.324	0.382	0.448	0.491	0.531
28	0.317	0.375	0.440	0.483	0.522
29	0.312	0.368	0.433	0.475	0.513
30	0.306	0.362	0.425	0.467	0.504

The calculated value must be equal to or exceed the critical value in this table for significance to be shown.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

Chi-squared distribution formula

$$X^2 = \sum \frac{(O-E)^2}{E} \qquad df = (r-1)(c-1)$$

Critical values for chi-squared distribution

	Level of significance for a one-tailed test					
	0.10	**0.05**	**0.025**	**0.01**	**0.005**	**0.0005**
	Level of significance for a two-tailed test					
df	**0.20**	**0.10**	**0.05**	**0.025**	**0.01**	**0.001**
1	1.64	2.71	3.84	5.02	6.64	10.83
2	3.22	4.61	5.99	7.38	9.21	13.82
3	4.64	6.25	7.82	9.35	11.35	16.27
4	5.99	7.78	9.49	11.14	13.28	18.47
5	7.29	9.24	11.07	12.83	15.09	20.52
6	8.56	10.65	12.59	14.45	16.81	22.46
7	9.80	12.02	14.07	16.01	18.48	24.32
8	11.03	13.36	15.51	17.54	20.09	26.12
9	12.24	14.68	16.92	19.02	21.67	27.88
10	13.44	15.99	18.31	20.48	23.21	29.59
11	14.63	17.28	19.68	21.92	24.73	31.26
12	15.81	18.55	21.03	23.34	26.22	32.91
13	16.99	19.81	22.36	24.74	27.69	34.53
14	18.15	21.06	23.69	26.12	29.14	36.12
15	19.31	22.31	25.00	27.49	30.58	37.70
16	20.47	23.54	26.30	28.85	32.00	39.25
17	21.62	24.77	27.59	30.19	33.41	40.79
18	22.76	25.99	28.87	31.53	34.81	42.31
19	23.90	27.20	30.14	32.85	36.19	43.82
20	25.04	28.41	31.41	34.17	37.57	45.32
21	26.17	29.62	32.67	35.48	38.93	46.80
22	27.30	30.81	33.92	36.78	40.29	48.27
23	28.43	32.01	35.17	38.08	41.64	49.73
24	29.55	33.20	36.42	39.36	42.98	51.18
25	30.68	34.38	37.65	40.65	44.31	52.62
26	31.80	35.56	38.89	41.92	45.64	54.05
27	32.91	36.74	40.11	43.20	46.96	55.48
28	34.03	37.92	41.34	44.46	48.28	56.89
29	35.14	39.09	42.56	45.72	49.59	58.30
30	36.25	40.26	43.77	46.98	50.89	59.70
40	47.27	51.81	55.76	59.34	63.69	73.40
50	58.16	63.17	67.51	71.42	76.15	86.66
60	68.97	74.40	79.08	83.30	88.38	99.61
70	79.72	85.53	90.53	95.02	100.43	112.32

The calculated value must be equal to or exceed the critical value in this table for significance to be shown.

Wilcoxon Signed Ranks test process

- Calculate the difference between two scores by taking one from the other
- Rank the differences giving the smallest difference Rank 1

  Note: do not rank any differences of 0 and when adding the number of scores, do not count those with a difference of 0, and ignore the signs when calculating the difference
- Add up the ranks for positive differences
- Add up the ranks for negative differences
- T is the figure that is the smallest when the ranks are totalled (may be positive or negative)
- N is the number of scores left, ignore those with 0 difference

Critical values for the Wilcoxon Signed Ranks test

	Level of significance for a one-tailed test		
	0.05	0.025	0.01
	Level of significance for a two-tailed test		
n	0.1	0.05	0.02
N=5	0	-	-
6	2	0	-
7	3	2	0
8	5	3	1
9	8	5	3
10	11	8	5
11	13	10	7
12	17	13	9

The calculated value must be equal to or less than the critical value in this table for significance to be shown.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

SECTION A

DEVELOPMENTAL PSYCHOLOGY

Answer ALL questions. Write your answers in the spaces provided.

1 In your studies of developmental psychology you will have learned about Punch (2002).

(a) Describe the procedure used by Punch (2002) in her ethnographic fieldwork.

(2)

Punch carried out ethnographic fieldwork in a rural community in Bolivia, spending a long period there observing and interviewing children and their families about youth transitions. In the school she used five classroom-based tasks to collect qualitative data: the children produced drawings, took photographs, kept diaries, completed worksheets and took part in a participatory rural appraisal (PRA).

(b) Explain **one** weakness of Punch's (2002) ethnographic fieldwork study.

(2)

The study may be culturally biased because Punch, a Western researcher, had to interpret the drawings, diaries and PRA answers of Bolivian children from her own Western perspective. This means her conclusions may not truly reflect the children's own meanings, so the findings may not improve our understanding of development in all cultures.

(Total for Question 1 = 4 marks)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

2 Diego works at a local nursery. He investigated whether the use of colour in the learning environment made a difference to cooperative behaviour in children. He observed 29 children aged four years old at play for a single nursery session. Diego recorded the number of children who demonstrated mostly cooperative behaviours. He also recorded the number of children who demonstrated mostly uncooperative behaviours.

- Condition A: 16 children played in a room with orange walls.
- Condition B: 13 children played in a room with white walls.

Diego's results are shown in **Table 1**.

	Number of children demonstrating mostly cooperative behaviours	**Number of children demonstrating mostly uncooperative behaviours**
Condition A **Children played in a room with orange walls**	12	4
Condition B **Children played in a room with white walls**	7	6

Table 1

(a) Convert the data shown in **Table 1** for the children showing cooperative behaviour in **Condition A** to a percentage of all the children in the investigation.

You **must** give your answer in whole numbers.

(1)

Space for calculations

Total children = 16 + 13 = 29

Condition A cooperative = 12

12 ÷ 29 × 100 = 41.38% ⇒ 41%

Percentage of children in Condition A showing **cooperative** behaviour ..... *41%* .....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

(b) Convert the data shown in **Table 1** for the children showing uncooperative behaviour in **Condition A** to a percentage of all the children in the investigation.

You **must** give your answer in whole numbers.

(1)

Space for calculations

Condition A uncooperative = 16 − 12 = 4

4 ÷ 29 × 100 = 13.79% ⇒ 14%

Percentage of children in Condition A showing **uncooperative** behaviour ..... *14%* .....

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(c) Calculate the chi-squared for the data gathered by Diego in his investigation by completing **Table 2**.

Your answers should **all** be correct to **two** decimal places.

(4)

		Observed	Expected	O-E	$(O-E)^2$	$(O-E)^2/E$
Children played in a room with orange walls	**Demonstrating mostly cooperative play**	12	10.48	*1.52*	*2.31*	*0.22*
	Demonstrating mostly uncooperative play	4	5.52	*−1.52*	*2.31*	*0.42*
Children played in a room with white walls	**Demonstrating mostly cooperative play**	7	8.52	*−1.52*	*2.31*	*0.27*
	Demonstrating mostly uncooperative play	6	4.48	*1.52*	*2.31*	*0.52*
					Chi-squared =	*1.43*

Table 2

Space for calculations

Expected = row total × column total ÷ grand total, eg 16 × 19 ÷ 29 = 10.48

O − E: 12 − 10.48 = 1.52, 4 − 5.52 = −1.52, 7 − 8.52 = −1.52, 6 − 4.48 = 1.52

$(O - E)^2 = 1.52^2 = 2.3104 = 2.31$ (2 d.p.) for every cell

2.31 ÷ 10.48 = 0.22, 2.31 ÷ 5.52 = 0.42, 2.31 ÷ 8.52 = 0.27, 2.31 ÷ 4.48 = 0.52

$\chi^2 = 0.22 + 0.42 + 0.27 + 0.52 = 1.43$

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

(d) Explain **one** improvement Diego could make to his investigation.

(2)

Diego could use more than two wall colours, for example rooms painted blue, green and yellow as well as orange and white, to see whether specific colours change cooperative behaviour. This would measure the effects of a variety of coloured environments on the behaviour of four-year-olds, making his findings more generalisable to different nursery environments.

(Total for Question 2 = 8 marks)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

3 Thomas takes care of his niece, Miranda, twice a week whilst her father is at work. Miranda's favourite drink is milk. She normally points at her cup if she wants a drink. Thomas has always said the word 'milk' when he hands her the cup and smiles and praises her if she repeats the word.

This week, when Thomas was taking care of her, Miranda said the word 'milk' when he handed her the cup and he smiled and praised her. Later that day, before pointing to her cup, Miranda said the word 'milk' again.

Explain **one** strength and **one** weakness of using Skinner's theory of language to explain Miranda's use of the word 'milk'.

Strength

Skinner would see Miranda's word 'milk' as a mand learned through positive reinforcement: her thirst is the motivating operation, the cup is the discriminative stimulus, saying 'milk' is the response, and Thomas's smile, praise and the milk are the reinforcing stimuli. Because Thomas reinforced her every time, she now says 'milk' herself before pointing, exactly as operant conditioning predicts.

Weakness

Miranda only sees Thomas twice a week, so she will not be reinforced every time she says 'milk' but still uses the word, suggesting reinforcement is not a complete explanation. Chomsky would argue she was born with a language acquisition device (LAD), giving her an innate ability and need to communicate for things she wants such as milk, which Skinner's theory ignores.

(Total for Question 3 = 4 marks)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

QUESTION 4 BEGINS ON THE NEXT PAGE.

4 Kristoff has been accused of spraying graffiti on the wall of his neighbour's shed for a second time. His image was caught on CCTV. When he was questioned by his neighbour he lied and said that he had never been in his neighbour's garden and did not know where the shed was.

A youth offending officer is now working with Kristoff. The youth offending officer has asked Kristoff to describe his early childhood. His mother was taken seriously ill just after he was born and was not able to care for him. His father worked for long periods of time in another country, so was also unable to care for him.

For the first three years of Kristoff's life, he lived in a number of care homes. Kristoff now finds it very difficult to make long-term relationships with other people. He is also known at school for risk-taking behaviour.

Discuss, using Bowlby's theory of attachment, the impact that early separation may have had on Kristoff's behaviour.

You must make reference to the context in your answer.

(8)

Bowlby proposed monotropy, the idea that a baby has an innate need to form one special attachment to a single primary caregiver, usually the mother. This bond must form during a critical period, roughly the first two and a half years of life. Kristoff's mother was seriously ill from birth and his father was working abroad, so neither could care for him and he had no consistent primary caregiver during this critical period.

Bowlby's maternal deprivation hypothesis states that if the attachment is broken or never forms in the critical period, there are long-term social and emotional consequences. Bowlby argued the child builds an internal working model, a mental template of what relationships are like, from the primary attachment. As Kristoff moved between a number of care homes for his first three years, he never had a safe base, so his internal working model may be of carers who come and go. This would explain why he now finds it very difficult to form long-term relationships with other people.

Bowlby's 44 juvenile thieves study (1944) found that 14 of the thieves were affectionless psychopaths, and 12 of these 14 had experienced prolonged early separation from their mothers,

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

stemup.co.uk

compared with very few of the control group. Kristoff's repeated graffiti on the shed and his risk-taking at school are forms of juvenile delinquency, and lying to his neighbour without apparent concern could reflect the lack of guilt Bowlby linked to affectionless psychopathy, so his behaviour fits the theory.

However, Bowlby may overstate the impact of separation. The care homes may have given Kristoff personalised, consistent care from key workers, which can reduce the effects of maternal deprivation, so his behaviour may not be due to his early experiences at all. Rutter also argued Bowlby confused deprivation with privation and that later good care can reverse early effects, so Kristoff's problems are not inevitable. Bowlby's evidence was also retrospective and correlational, so separation cannot be shown to cause delinquency.

Other factors could explain Kristoff's behaviour, such as imitating peers who spray graffiti (social learning) or the stress of his mother's illness. Overall, Bowlby's theory offers a convincing explanation of Kristoff's relationship difficulties and delinquency, but it is likely to be only part of the explanation alongside his later environment.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

(Total for Question 4 = 8 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

QUESTION 5 BEGINS ON THE NEXT PAGE.



5 Assess how far Brendgen et al. (2005) has furthered our understanding of social development in children.

(8)

Brendgen et al. (2005) investigated whether social aggression (eg spreading rumours, excluding others) and physical aggression in young children are caused by genes or environment. They used 234 pairs of 6-year-old twins (average age 72.7 months), both MZ and DZ, from Quebec in Canada. Teachers and peers rated each child on social and physical aggression using questionnaires. Comparing MZ and DZ twins showed that genetic factors and shared environmental factors each explained about 20% of social aggression, while non-shared environmental factors explained about 60%. Physical aggression was more strongly influenced by genes.

The study has furthered our understanding because the twin design separates the effects of genes and environment, showing that social aggression is mainly learned from experiences unique to each child, such as their own friendships. This has a practical application: parents, carers and teachers can see that the environment matters most, so they can help reduce the risk of children developing aggressive behaviour.

The use of both teacher and peer ratings, which were correlated with each other, also increases reliability, so we can be more confident the aggression measures are consistent and that the conclusions are trustworthy.

However, the peer ratings may have been affected by who the children's friends were on the day, so if the ratings were repeated another day the answers might change, reducing reliability. Also, social aggression keeps increasing until about 8 years of age, so data only from 6-year-olds cannot tell us how it develops in older children. The sample came from one Canadian region, which limits generalisability to other cultures, and ratings are subjective rather than direct

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

stemup.co.uk

observation.

Overall, Brendgen et al. (2005) has furthered our understanding to a fair extent by showing the large role of non-shared environment in social aggression, but only for young children in one culture, so further longitudinal research with older children is needed.

(Total for Question 5 = 8 marks)

TOTAL FOR SECTION A = 32 MARKS

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

SECTION B

Answer ALL questions from EITHER OPTION 1: CRIMINOLOGICAL PSYCHOLOGY OR OPTION 2: HEALTH PSYCHOLOGY.

Indicate which option you are answering by marking a cross in the box ☒. If you change your mind, put a line through the box ☒ and then indicate your new option with a cross ☒.

If you answer the questions in Option 1, put a cross in the box ☒ .

OPTION 1: CRIMINOLOGICAL PSYCHOLOGY

6 Describe what is meant by 'post-event information' as a factor influencing the reliability of eye-witness memory.

Post-event information is information a witness receives after the crime, for example from talking with other witnesses, seeing news reports or being asked leading questions by police. This information can be absorbed into and distort the original memory, reducing the accuracy of the witness's recall.

(Total for Question 6 = 2 marks)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

QUESTION 7 BEGINS ON THE NEXT PAGE.



7 Jasmine is a forensic psychologist. She has been asked to develop a psychological (case) formulation for Goldie. Goldie is preparing for a meeting with the parole board to review the length of her sentence.

Goldie was sentenced to a term in prison for assaulting another woman. Goldie experiences high rates of depression and anxiety. She has a record for alcohol and substance abuse. Goldie has also been diagnosed with an antisocial personality disorder.

(a) Explain **one** strength and **one** weakness of Jasmine using a psychological (case) formulation for Goldie.

(4)

Strength

Jasmine can develop a personalised plan for Goldie that links her depression, anxiety, alcohol and substance abuse and ASPD to her assault, helping predict what may trigger future aggression and preparing her for release. This tailored approach suits her needs, and Byrne and Howells (2002) argue women prisoners need better rehabilitation and management.

Weakness

Jasmine will need a multi-disciplinary team, eg clinical psychologists, prison staff and parole officers, to build an individual plan for Goldie's ASPD and substance abuse, which is time-consuming. The team may be hard to gather before her parole meeting, so with no plan in place she may lose the chance to reduce her sentence.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

(b) Explain **one** ethical issue Jasmine should have considered when using a psychological (case) formulation to understand Goldie's behaviour.

(2)

Jasmine should consider protection from psychological harm, as the formulation requires Goldie to discuss personal details such as her drug and alcohol abuse and depression. Although these life experiences may explain her aggression, talking about them may make her relive painful memories, so Jasmine must offer support and let her stop when she wishes.

(Total for Question 7 = 6 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

8 Carl had an argument with Nicolas, his neighbour, due to Carl regularly playing loud music until 2 am. Carl said Nicolas was being unreasonable as it was good music.

The next day, Carl saw Nicolas talking to another neighbour and got very angry as he assumed they were complaining about him. That evening Carl was still feeling angry, and he broke the front windows of his neighbours' houses.

Carl was convicted of causing criminal damage and was sentenced to do 150 hours of unpaid work and had to attend Cognitive Behavioural Therapy (CBT).

Explain **two** reasons why Cognitive Behavioural Therapy (CBT) may be an effective treatment for Carl to control his anger.

1 *CBT will challenge Carl's distorted thinking, which triggers his anger, such as assuming Nicolas and the other neighbour were complaining about him. Through role play he can practise reinterpreting such situations and modifying his angry feelings, and Lipsey (2009) found cognitive-behavioural interventions are effective with offenders.*

2 *CBT will also target Carl's inability to consider how his behaviour affects others, such as playing loud music until 2 am and thinking it was fine because it was good music. By learning to see his neighbours' point of view and control his anger, he is less likely to reoffend, eg by breaking windows again.*

(Total for Question 8 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

9 Anika wants to carry out an investigation to see whether characteristics of the defendant would influence jury decision-making. She placed posters in her local library asking for volunteers who had previously been a member of a jury. She asked them to contact her if they were willing to take part in her investigation using a mock trial.

(a) Explain **one** reason why Anika recruited her sample from those who had been a member of a jury.

(2)

Anika only wants to study people who have been on a jury and experienced real jury decision-making, so she restricted her sample to them. Members of the public who have never been on a jury would not be representative of her target population, so their mock-trial verdicts would tell her less about real juries.

(b) Explain **one** way Anika could improve her investigation to increase validity.

(2)

Anika should recruit former jurors from many places, not just posters in her local library, to increase population validity. Her sample would then be more representative of the characteristics of all jurors, rather than only volunteers who use her local library and may differ from the target population.

(Total for Question 9 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

10 Evaluate whether antisocial personality disorder (ASPD) can explain crime and anti-social behaviour.

(8)

Antisocial personality disorder (ASPD) is a personality disorder diagnosed in adults (18+) who show a pervasive disregard for the rights of others, with evidence of conduct disorder before age 15. Features include deceitfulness, impulsivity, irritability and aggression, reckless disregard for safety, irresponsibility and lack of remorse. People with ASPD do not conform to acceptable social norms, so they are more likely to commit crime and antisocial behaviour such as violence and threats. ASPD is thought to involve abnormal brain functioning, especially in the prefrontal cortex, which controls impulses, and the amygdala, which processes emotion and fear.

There is evidence to support this. Raine et al. (2000) found an 11% reduction in prefrontal grey matter in men with ASPD compared with controls, and Yang et al. (2008), using brain scanning, found emotional information was not processed normally in frontal regions of people with ASPD. This shows ASPD can be empirically tested and supports a biological explanation of impulsive, antisocial behaviour.

However, the evidence is correlational, so brain differences may be a result of other factors such as head injury, drug use or childhood abuse rather than a cause of crime. The explanation is also circular, as ASPD is partly diagnosed from antisocial and criminal behaviour, so it is used to explain the very behaviour that defines it. Many offenders do not have ASPD, and not everyone with ASPD commits crime.

Alternative explanations exist. Social learning theory suggests crime is imitated from role models, and media effects such as violent video games have been linked to aggression (Anderson and Dill, 2000). Self-fulfilling prophecy suggests a person labelled as violent may internalise the label and behave accordingly, so the crime is not due to ASPD.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

In conclusion, ASPD can explain some crime, especially impulsive and violent offending by a minority of persistent offenders, but it cannot explain all crime, so a combined biological and social explanation is more complete.

(Total for Question 10 = 8 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

11 Assess the effect of stress and trauma on the reliability of eye-witness memory.

(8)

Stress is a state of high physiological arousal. When witnessing a crime the HPA axis releases cortisol and the sympathetic nervous system increases arousal. The Yerkes-Dodson law suggests moderate arousal improves performance but very high arousal reduces it. High stress narrows attention onto central details, making the event vivid, but reduces attention to peripheral details such as the perpetrator's face. Weapon focus is an example: attention is drawn to the weapon. Trauma, such as the sudden onset of a threat or seeing an injury, produces very high stress, which may reduce recall accuracy.

Lab evidence supports a negative effect. Deffenbacher et al. (2004), a meta-analysis, found high stress reduced accuracy of identifying the perpetrator's face and recall of crime details. Loftus et al. (1987) found participants who saw a man holding a weapon identified him less accurately than when he held a cheque, supporting weapon focus. This suggests stress and trauma make eye-witness memory less reliable.

However, lab studies lack ecological validity, as participants know no real crime has happened, so their stress is far lower than real witnesses. In real cases stress may improve memory. Yuille and Cutshall (1986) found witnesses to a real shooting gave accurate, detailed accounts months later and resisted misleading questions, and the most distressed witnesses were among the most accurate. Christianson and Hubinette (1993) found bank robbery victims who were threatened remembered more than bystanders.

The effect also depends on individual differences, such as how the witness appraises the event, and on which details are needed: central details may be enhanced but peripheral ones lost. Ethical issues also mean truly traumatic events cannot be created in research.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

Overall, stress and trauma tend to reduce the reliability of memory for peripheral details such as faces, but real-life evidence shows central details can be remembered well, so the effect is not simply negative.

(Total for Question 11 = 8 marks)

TOTAL FOR SECTION B OPTION 1 = 32 MARKS

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

SECTION B

If you answer the questions in Option 2, put a cross in the box ☒ .

OPTION 2: HEALTH PSYCHOLOGY

12 Describe what is meant by the term 'social support' as a factor affecting stress.

Social support is the comfort, help and assistance a person receives from others, such as friends, family and colleagues, eg emotional support, practical help or advice. It can act as a buffer, helping the person cope with biological, psychological and social stressors and so reducing their stress.

(Total for Question 12 = 2 marks)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

QUESTION 13 BEGINS ON THE NEXT PAGE.

13 Jasmine is a clinical psychologist. She has been asked to investigate brain regions as an explanation for Goldie's stress. Goldie is finding life very difficult as the current treatment she has been using to manage her stress is no longer working.

Goldie thinks she may have to give up work as she does not want to leave her house. Goldie experiences high levels of depression and anxiety and has been diagnosed with an anxiety disorder. She also has a record of alcohol and substance abuse.

(a) Explain **one** strength and **one** weakness of Jasmine using brain regions as an explanation for Goldie's stress.

(4)

Strength

Jasmine can use an objective method such as an fMRI or EEG scan to measure activity in Goldie's brain regions linked to stress and anxiety, such as the amygdala. This increases the reliability of the data, as other researchers could replicate the scans when Goldie is stressed and should find consistent results.

Weakness

Explaining Goldie's stress, depression and anxiety only through brain regions is reductionist, as it ignores other factors. For example, excess cortisol, her alcohol and substance abuse, or the pressure of possibly losing her job could also explain why Goldie is finding life so difficult.

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

(b) Explain **one** ethical issue Jasmine should have considered when investigating Goldie's brain regions associated with stress.

(2)

Jasmine should protect Goldie from psychological harm, as Goldie is already highly anxious and does not want to leave her house, so attending a brain scan could increase her distress. If the scans do not explain her stress, she may also be disappointed, so Jasmine must gain informed consent and offer support.

(Total for Question 13 = 6 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

14 Carl had an argument with Nicolas, his neighbour, due to Nicolas regularly playing loud music until 2 am. Carl thought Nicolas was being unreasonable as Carl could not get to sleep.

The next day, Carl saw Nicolas talking to another neighbour and felt very anxious as he assumed they were complaining about him. That evening he was still feeling anxious and could not sleep again.

Carl's heart rate increased and he had chest pains every time he saw Nicolas, so Carl tried to avoid him. Carl visited his doctor who diagnosed him with an anxiety disorder and recommended Cognitive Behavioural Therapy (CBT).

Explain **two** reasons why Cognitive Behavioural Therapy (CBT) may be an effective treatment for Carl.

1 *CBT will challenge Carl's distorted thinking, which triggers his anxiety, such as assuming Nicolas and the other neighbour were complaining about him. Through role play and modelling in natural settings he can learn more realistic thoughts, and Otte (2011) found CBT effective in treating adult anxiety disorders.*

2 *CBT will also tackle Carl's excessive fear and avoidance, such as avoiding Nicolas so his heart rate does not rise. By gradually facing Nicolas and understanding his neighbour's point of view, Carl's anxiety should fall, reducing the chance of panic attacks with chest pains.*

(Total for Question 14 = 4 marks)

DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA DO NOT WRITE IN THIS AREA

stemup.co.uk

15 Anika wants to carry out an investigation to see whether personality traits are linked to stress. She placed posters in the local doctor's surgery asking for volunteers with a Type A personality. She asked them to contact her if they were willing to take part in her investigation and complete a questionnaire about their personality and stress.

(a) Explain **one** reason why Anika recruited her sample from those who have a Type A personality.

(2)

Anika only wants to study people with a Type A personality, as they are known to be more prone to stress, so she restricted her sample. A general opportunity sample from the surgery would include people who are not Type A and so would not be representative of her target population.

(b) Explain **one** way Anika could improve her investigation to increase validity.

(2)

Anika should recruit from several doctors' surgeries, not just her local one, to get a wider range of patients and increase population validity. Her sample would then better represent all Type A personalities, rather than just patients of one local surgery who may differ from the target population.

(Total for Question 15 = 4 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

16 Evaluate whether problem-focusing and emotion-focusing coping strategies are helpful in dealing with stress.

(8)

Lazarus and Folkman (1984) distinguished two types of coping. Problem-focused coping aims to remove or reduce the stressor itself by tackling it directly, eg planning, time management, seeking information and looking for solutions. Emotion-focused coping aims to reduce, tolerate or eliminate the emotional response to a stressor rather than the stressor itself, eg distraction to keep the mind occupied, withdrawal, denial, relaxation or seeking emotional support.

Problem-focused coping is often helpful because it deals with the cause, so the stress should not return. Ebrahimi et al. (2013) found that when student nurses with depression were trained in problem-solving skills, their mental health improved, showing it is a helpful strategy for coping with stress.

Emotion-focused coping can be less helpful. Cicognani (2011) found that emotion-focused strategies such as withdrawal were correlated with a depressed mood, so avoiding a stressor may make things worse in the long term. However, emotion-focused coping is more effective than problem-focused coping when the stressor cannot be changed, such as a bereavement or sitting an examination, where trying to solve the problem may only add frustration. Relaxation techniques such as progressive muscle relaxation reduce cortisol and arousal, so problem-focused coping is not the only solution.

Much of this evidence is correlational, so depression may cause withdrawal rather than the reverse. People also usually combine both strategies, and the best choice depends on individual differences and how controllable the stressor is.

In conclusion, both strategies can be helpful: problem-focused coping works best for controllable

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

stressors and emotion-focused coping for uncontrollable ones, so flexibly using both is most effective.

(Total for Question 16 = 8 marks)

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

17 Assess life events and daily hassles as factors that affect stress.

(8)

Life events are major changes that require significant readjustment, such as death of a spouse, divorce or moving house. Holmes and Rahe (1967) created the Social Readjustment Rating Scale, giving 43 life events a value in life change units (LCUs) out of 100, eg death of a spouse 100 and divorce 73; the higher the score, the more stressful the event. Daily hassles are the minor, frequent irritations of everyday life, such as losing things or concerns about weight. People can experience stress from hassles even without major life events.

Holmes and Rahe found that scores over 300 LCUs in a year were linked to about an 80% chance of developing a stress-related illness, suggesting life events have a major effect on stress. Rahe et al. (1970) found a positive correlation between LCU scores and illness in US Navy personnel, supporting this.

However, the correlations for life events are weak and cannot show cause and effect. The scale gives fixed values and ignores individual appraisal; Veisani et al. (2021) found people trained to enhance coping skills were less affected by stress, so fixed values may not be a valid measure. Recalling a year of events is also unreliable.

Daily hassles may be a stronger factor. Kanner et al. (1981) found a positive correlation between the number of daily hassles and psychological symptoms, and hassles predicted symptoms better than life events. DeLongis et al. (1982) found that both the frequency and intensity of hassles were related to illness. Life events may also act through hassles, as divorce creates many daily problems.

Overall, both affect stress, but daily hassles appear to be a more consistent predictor than life

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

events, and the impact of either depends on how the individual appraises and copes with them.

(Total for Question 17 = 8 marks)

TOTAL FOR SECTION B OPTION 2 = 32 MARKS
TOTAL FOR PAPER = 64 MARKS

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

BLANK PAGE

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

stemup.co.uk

DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA
DO NOT WRITE IN THIS AREA

BLANK PAGE

stemup.co.uk

BLANK PAGE

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

DO NOT WRITE IN THIS AREA

stemup.co.uk