Write your name here

Surname: StemUp Model Solution | Other names:

Pearson Edexcel
International Advanced Level

Centre Number | Candidate Number

Psychology

International Advanced Level
Paper 3: Applications of Psychology

Thursday 26 October 2017 – Afternoon
Time: 1 hour 30 minutes

Paper Reference
WPS03/01

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 ▶

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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.

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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.

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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.

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SECTION A

DEVELOPMENTAL PSYCHOLOGY

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

1 Kareem is 17 months old, and is currently being looked after by his grandmother while his mother is in hospital. Kareem's grandmother meets his needs. After 10 days he is reunited with his mother and shows very few signs of anxiety.

(a) Describe Bowlby's maternal deprivation hypothesis in relation to Kareem.

(2)

Bowlby claimed a child needs the continuous presence of the mother (primary caregiver) during the critical period of the first two and a half years, or long-term harm may follow. Kareem is 17 months old, so he is in this period, but his separation was only 10 days and his grandmother met his needs, so he shows few signs of anxiety and is unlikely to suffer long-term effects.

(b) Mateus is 17 months old, and is an orphan showing signs of privation.

Describe why Mateus is showing signs of privation.

(2)

As an orphan, Mateus may never have had a consistent primary caregiver giving him emotional care, so he has never formed an attachment bond with anyone. This is privation (no attachment was ever made) rather than deprivation (an attachment that was formed and then broken).

(Total for Question 1 = 4 marks)

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2 Samad and Amna investigated attachment in infants aged one to two years old using Ainsworth's strange situation procedure. The sample comprised of 20 families where both parents were in full-time employment.

Table 1 shows results for the observed reunion behaviour.

	Reunion behaviour		
	Infant shows positive and happy responses when caregiver returns	**Infant approaches caregiver, but resists contact, may even push them away**	**Infant shows little interest when caregiver returns**
% of infants	70	15	15

Table 1

(a) Give **one** conclusion that could be made from this investigation.

(1)

Most infants (70%) were securely attached, so both parents working full-time does not seem to harm the attachment type of most infants.

(b) Ainsworth suggested the 'caregiver sensitivity' hypothesis as an explanation for different attachment types.

Define what is meant by 'caregiver sensitivity'.

(1)

How accurately and promptly a caregiver notices and responds to the signals an infant gives about its needs.

(c) Describe the research methodology used by Samad and Amna in their investigation.

(2)

They used a controlled, structured observation in a laboratory playroom, following the standardised episodes of the strange situation (caregiver leaves, a stranger enters, caregiver returns). Observers recorded each infant's reunion behaviour using set behavioural categories, so the infants could be classified as securely attached, insecure-resistant or insecure-avoidant, giving the percentages in Table 1.

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(d) The strange situation procedure has been used cross-culturally.

Explain **one** reason why cross-cultural research is carried out when studying children.

(2)

Cross-cultural research tests whether children's behaviour, such as attachment types, is universal (innate) or shaped by culture and upbringing. The same procedure is carried out in different cultures and the results are compared: similarities suggest nature, differences suggest nurture, eg childrearing practices.

(Total for Question 2 = 6 marks)

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3 Claudio and Sasha studied the education and employment patterns of 31 boys in their local community using a closed questionnaire. Their results can be seen in **Table 2**.

	Education and employment patterns of 13 to 19-year-old boys			
	Remained in education	**Worked for own family**	**Worked for an employer**	**Worked away from home**
Number of boys	2	7	6	16

Table 2

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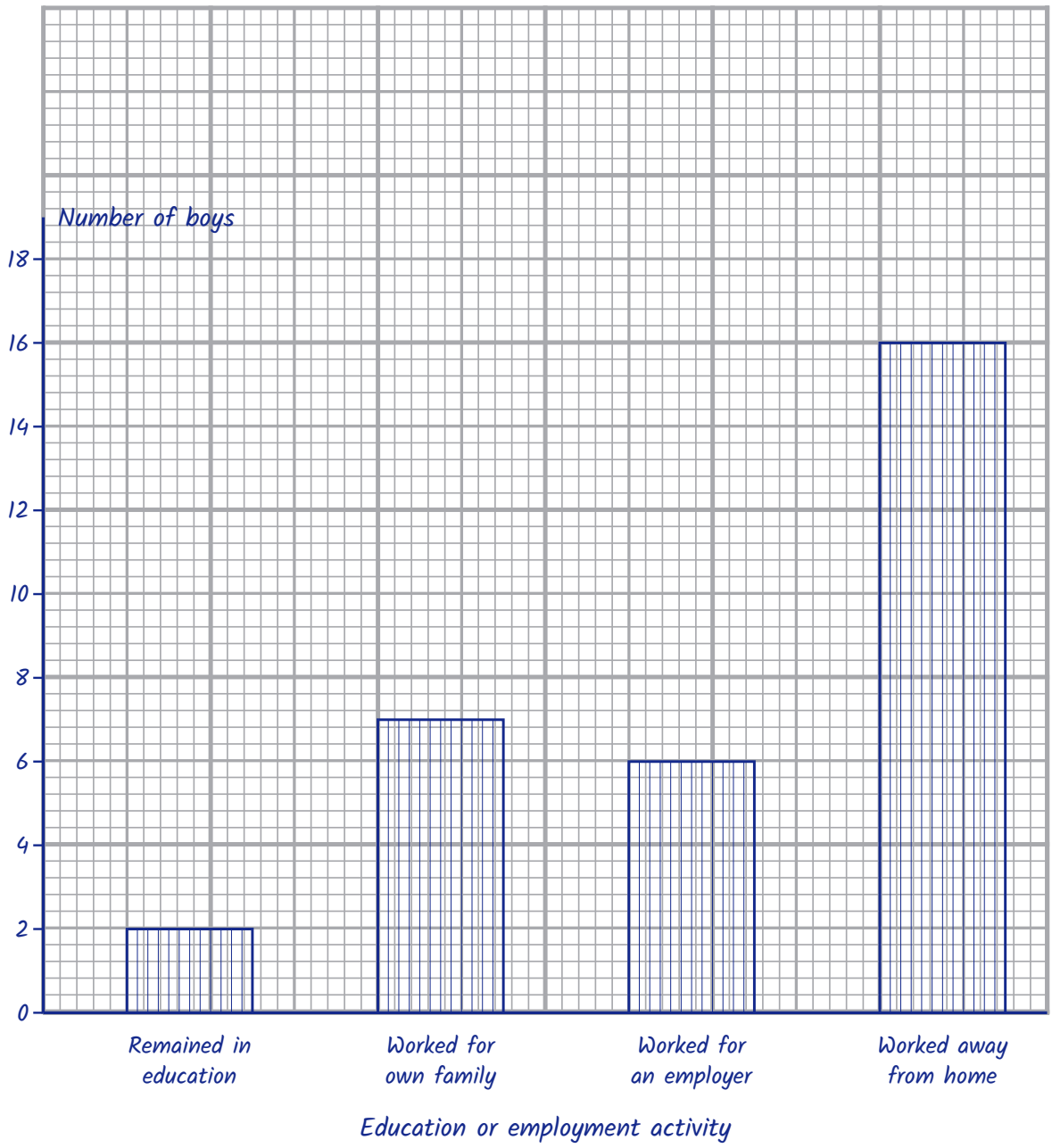
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(a) Draw a bar chart to illustrate the data given in **Table 2**.

(3)

Title

Bar chart to show the education and employment patterns of the 31 boys aged 13 to 19



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(b) Give **one** strength of Claudio and Sasha's study.

(1)

The closed questionnaire gave every boy the same fixed answer choices, so their education and employment responses produced quantitative data that could easily be compared, as in Table 2.

(c) Explain **one** improvement that Claudio and Sasha could make to their study.

(2)

They could add open questions asking the boys why they chose to stay in education or work, eg away from home. This would give rich qualitative data explaining their decisions, increasing the validity of their findings.

(Total for Question 3 = 6 marks)

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4 Evaluate Piaget's stages of cognitive and language development.

(8)

Piaget proposed that children actively construct knowledge through schemas, which are mental representations of the world. New experiences are assimilated into existing schemas; when they do not fit, disequilibrium causes accommodation, where schemas change, until equilibration is reached. He claimed all children pass through four invariant, universal stages: sensorimotor (0 to 2 years, object permanence develops), pre-operational (2 to 7, symbolic thought and language grow but children are egocentric and cannot conserve), concrete operational (7 to 11, conservation and logic about concrete objects) and formal operational (11+, abstract and hypothetical reasoning). For Piaget, language depends on cognitive development: thought comes first and words are attached to concepts the child already understands.

A strength is that the theory has useful applications to education. It suggests children learn best by discovery when they are ready for a stage, which influenced child-centred teaching such as the Plowden Report (1967). Piaget also gathered detailed evidence through tasks such as conservation of liquid and the three mountains task, so the stages are based on careful observation of real children.

However, later research suggests Piaget underestimated children. Hughes (1975) found that most children aged 3 and a half to 5 could hide a doll from policemen dolls, showing they could decentre when the task made human sense. McGarrigle and Donaldson (1974) found far more 6-year-olds conserved number when "naughty teddy" messed up the counters than in Piaget's version, suggesting his tasks were confusing and lacked validity, so the stage ages may be wrong.

The idea that stages are universal is also challenged. Dasen (1994) found Aboriginal children

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reached concrete operational thinking on some tasks later than Western children, but earlier on spatial tasks, so culture affects the rate of development. The stages also ignore individual differences between children.

His view of language can be criticised too. Chomsky argued children have an innate language acquisition device, which explains why language develops so rapidly and with universal grammar, and Vygotsky argued that language and social interaction drive cognitive development rather than simply following it.

In conclusion, Piaget's stages give a useful, influential framework for how thinking develops, but the evidence suggests development is more gradual and dependent on culture and language than he claimed.

(Total for Question 4 = 8 marks)

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5 Assess whether Cassibba et al.'s (2013) research is a scientific study of development.

(8)

A scientific study is objective, empirical, controlled and replicable, testing falsifiable hypotheses so that conclusions about cause and effect can be drawn from quantitative data. Cassibba et al. (2013) carried out a meta-analysis of Italian attachment research, combining the findings of studies that used the strange situation procedure and the Adult Attachment Interview. They compared the distribution of attachment types in Italian samples with the worldwide distribution reported by van IJzendoorn and Kroonenberg (1988) and found it to be similar, with secure attachment the most common type.

There are scientific features. The meta-analysis used clear criteria for selecting studies, eg only Italian samples, which makes the procedure systematic and replicable. The studies it reviewed used the strange situation, a structured observation with standardised episodes and operationalised behaviours such as proximity seeking and resistance to contact, often with high inter-rater reliability, so the original data was objective. Combining many studies also gives a very large sample, so the results are more reliable and generalisable to Italian infants than any single study.

However, a meta-analysis uses secondary data, so Cassibba et al. had no control over how each study was carried out, for example the observers, settings or the ages of the infants. Variables were not manipulated, so no cause and effect relationship can be established, and there was no direct empirical testing of a hypothesis. Choosing which studies to include is partly subjective and there may be publication bias, as studies with non-significant findings are less likely to be published, which reduces objectivity.

On the other hand, fully scientific methods such as lab experiments that manipulate

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attachment, or brain scans, would be unethical or inappropriate with young children, so a meta-analysis of standardised observations may be as scientific as developmental research into attachment can be.

Overall, Cassibba et al. (2013) is partly scientific: it draws on controlled, standardised observations and a systematic, replicable procedure, but because it relies on secondary data and cannot show cause and effect, it is less scientific than an experiment.

(Total for Question 5 = 8 marks)

TOTAL FOR SECTION A = 32 MARKS

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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 Ben is often in trouble at school and has become involved with a group of young people who have been committing crimes. His teachers are not surprised by his criminal and anti-social behaviour.

Describe, using your understanding of self-fulfilling prophecy, Ben's criminal and anti-social behaviour.

His teachers expect Ben to behave badly, so they label him as a troublemaker and treat him that way, eg punishing him more and encouraging him less. Ben internalises this label into his self-concept, so he acts in line with it by joining the group committing crimes, which fulfils the teachers' original expectations.

(Total for Question 6 = 2 marks)

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7 Donal investigated the effects of stress and trauma on eyewitness memory. Participants viewed video clips of staged crimes. Group A viewed non-stressful, non-traumatic crimes and Group B viewed stressful, traumatic crimes. Participants were then asked to identify the offender in the video clips from three photographs.

(a) Explain **one** positive effect and **one** negative effect of stress and trauma that Donal may expect to find in his investigation.

(4)

Positive

Watching the stressful, traumatic crimes may trigger the fight or flight response in Group B, releasing adrenaline. Moderate arousal increases alertness and attention to the offender's face, so they may be more accurate when choosing the offender from the three photographs.

Negative

Very high stress may cause anxiety in Group B, narrowing attention onto the crime itself (eg a weapon) and away from the offender's face. This reduces concentration and encoding, so they may be less accurate at identifying the offender from the photographs than Group A.

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(b) Describe **two** reasons why it might be preferable to use qualitative rather than quantitative data in Donal's investigation.

(4)

1 *Qualitative data would let participants explain why they chose a particular photograph, eg which facial features they remembered from the clip. This is not possible if Donal only scores whether their identification was correct, so it gives more detailed and valid insight into the identification.*

2 *Participants could describe how stressed or frightened they felt watching the traumatic clips and how confident they were in their recall. This gives meaning to the quantitative accuracy scores, helping Donal understand how stress and trauma actually affected each eyewitness.*

(Total for Question 7 = 8 marks)

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8 Padraic and Coleen carried out research comparing interview techniques following a crime. 62 volunteer participants watched a video clip of a crime and 48 hours later were interviewed using either a cognitive interview or a standard interview.

The results of the research are shown in **Table 3**.

Items recalled	Mean number of items recalled in cognitive interview	Mean number of items recalled in standard interview
Correct items	43.46	29.56
Incorrect items	9.30	4.10
Confabulated items	0.70	0.65

Table 3

(a) Padraic concludes that cognitive interviews are successful.

Justify Padriac's conclusion with reference to the data in **Table 3**.

(2)

The mean number of correct items recalled in the cognitive interview was 43.46 compared with 29.56 in the standard interview, 13.90 more. This shows cognitive interviews help witnesses recall more accurate detail about the crime, so they are successful.

(b) Coleen disagrees, stating that cognitive interviews are not successful.

Justify Coleen's statement with reference to the data in **Table 3**.

(2)

The mean number of incorrect items was 9.30 in the cognitive interview compared with only 4.10 in the standard interview, over twice as many, and confabulated items were slightly higher (0.70 vs 0.65). So cognitive interviews also increase inaccurate recall, which could mislead a police investigation.

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(c) When conducting the cognitive and standard interviews, Padraic and Coleen followed the British Psychological Society (BPS) Code of Ethics and Conduct (2009).

Describe **one** ethical issue that should be considered when conducting interviews.

(2)

Informed consent: the BPS states participants must be told the purpose and nature of the research before taking part. So before the interviews, participants should be told they will be questioned about the crime video and how their answers will be used, and should agree to take part, knowing they can withdraw.

(Total for Question 8 = 6 marks)

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9 In criminological psychology you will have studied one of the following contemporary studies in detail.

- Ruva, McEvoy and Bryant (2007) Effects of pre-trial publicity and jury deliberation on jury bias and source memory errors.
- Valentine and Mesout (2009) Eyewitness identification under stress in the London Dungeon.

Evaluate your chosen contemporary study.

(8)

Contemporary study *Valentine and Mesout (2009)*

Valentine and Mesout studied whether anxiety affects eyewitness identification. 56 visitors (29 female, 27 male) to the London Dungeon Horror Labyrinth wore a wireless heart rate monitor, and a baseline heart rate was taken from 20 employees of a London department store. In the labyrinth an actor, the "scary person", blocked their path. Afterwards participants completed the State Anxiety Inventory, described the scary person and tried to identify them from a nine-person line-up. Only 17% of high-anxiety participants correctly identified the scary person compared with 75% of low-anxiety participants, so high anxiety impaired identification.

A strength is high ecological validity: participants felt real fear in a real setting, which would be unethical to create in a lab, so the results apply to eyewitnesses of real crimes. Heart rate was measured objectively with a monitor and compared with a baseline, which confirms the labyrinth really raised arousal.

However, anxiety was also measured with a self-report questionnaire, which may be affected by social desirability or poor insight into feelings. As a field study, extraneous variables such as lighting, group size and time spent looking at the scary person could not be fully controlled, reducing internal validity. Participants were offered a reduced entrance price, so the volunteers may be a biased sample.

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The study was ethical: visitors already chose to experience the labyrinth, they gave informed consent after the tour and could withdraw their data. It also has practical value, as courts should treat identifications made under high stress with caution.

Overall, the study gives valid real-life evidence that high anxiety reduces identification accuracy, although its lack of control and sampling means the findings should be generalised carefully.

(Total for Question 9 = 8 marks)

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10 Assess whether mock jury research is an effective method of studying jury decision making.

(8)

In mock jury research, participants act as jurors: they are given pre-selected trial evidence, eg a videotaped or written trial, and asked to reach a verdict, often after deliberating in a group. Researchers manipulate one variable, such as pre-trial publicity, and measure its effect on verdicts. Mock juries are used because in the UK the Contempt of Court Act (1981) prevents researchers studying the deliberations of real juries. For example, Ruva et al. (2007) showed students a videotaped murder trial in mock juries of 4 to 6 people after some had read biased pre-trial publicity.

Mock juries are effective in that the trial can be tightly controlled, so extraneous variables are reduced and cause and effect can be established, eg Ruva et al. found exposure to pre-trial publicity increased guilty verdicts. The standardised procedure can be replicated, so findings can be tested for reliability. It is also ethical, as no real defendant is affected by the decision.

However, the research lacks ecological validity. Participants know the trial is not real, so there are no consequences for the defendant and they may not deliberate as seriously as real jurors deciding someone's future. Mock juries are often smaller than a real jury of 12, which changes group dynamics such as conformity during deliberation. Trials are often shortened, eg Ruva et al. used an edited 30-minute video, whereas real trials can last weeks, and pre-selected evidence may introduce researcher bias.

Samples are often university students, who may differ from real jurors in age and experience. However, Bornstein (1999) reviewed mock jury studies and found few differences between student and community samples, which suggests this is less of a problem than it seems. Shadow juries, who sit in on real trials, can increase realism but are still not deciding a real

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verdict.

Overall, mock jury research is an effective, and often the only legal, way to study how specific factors affect jury decisions under controlled conditions, but its lack of realism means conclusions should be checked against real-life evidence before being applied to the justice system.

(Total for Question 10 = 8 marks)

TOTAL FOR SECTION B OPTION 1 = 32 MARKS

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SECTION B

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

OPTION 2: HEALTH PSYCHOLOGY

11 Michael was a passenger in a car that had to brake suddenly to avoid hitting a person in the road. He found the incident stressful.

Describe **one** physiological response that Michael may have experienced within the first 30 seconds after the incident.

The shock of the sudden braking activates the hypothalamus, which triggers the sympathetic adrenal medullary system: the adrenal medulla releases adrenaline into Michael's blood. This causes fight or flight, so his heart rate and breathing rate increase rapidly.

(Total for Question 11 = 2 marks)

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12 Alain investigated whether there was a link between stress levels and the social support systems of married adults and also unmarried adults. Participants completed a closed questionnaire about their social support systems and their stress levels.

(a) Explain **one** positive effect and **one** negative effect of social support systems that Alain may expect to find in his investigation.

(4)

Positive

Married adults may have a spouse to share worries with, giving extra emotional social support that buffers them against stress, so they report lower stress. Eskin (2003) found deficits in social support are linked to psychological problems, so marriage may remove this deficit.

Negative

Marriage can bring obligations to an extended family, which may be a source of conflict and demands, so it increases stress. Sonuga-Barke and Mistry (2000) found mothers in nuclear families reported fewer mental health problems than those in extended families, so more support is not always beneficial.

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(b) Describe **two** reasons why it might be preferable to use qualitative rather than quantitative data in Alain's investigation.

(4)

1 *Qualitative data would allow participants to explain why they feel stressed or not stressed, eg particular problems at home or work. This is not possible if Alain only scores stress levels from the closed questionnaire, so he gains richer, more valid insight into the causes of stress.*

2 *Participants could describe whether they feel their marriage, or being unmarried, actually gives them support, and what kind (eg emotional or practical). This gives meaning to the quantitative stress scores and helps Alain explain any link between social support and stress.*

(Total for Question 12 = 8 marks)

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13 Agnetha and Jon researched the link between coping strategies and anxiety.
Group A participants were given appraisal focusing strategies to use.
Group B participants were given problem focusing strategies to use.

Participants self-rated their anxiety levels using a score out of ten, with ten being high anxiety. Scores were recorded in relation to three scenarios that were given to participants before and after trialling the coping strategy.

The results of the research are shown in **Table 4**.

Scenario	Mean decrease in anxiety levels in Group A (appraisal focusing)	Mean decrease in anxiety levels in Group B (problem focusing)
Crowded room	6.31	7.97
Late for work	6.20	6.46
Lost their keys	4.12	5.84

Table 4

(a) Agnetha concludes that appraisal focusing strategies are effective.

Justify Agnetha's statement with reference to the data in **Table 4**.

(2)

Appraisal focusing produced a large mean decrease in anxiety in every scenario, eg 6.31 for a crowded room and 6.20 for being late for work, on a 10-point scale. This shows the strategy did reduce anxiety across different situations, so it is effective.

(b) Jon disagrees, stating that appraisal focusing is not effective.

Justify Jon's statement with reference to the data in **Table 4**.

(2)

Appraisal focusing gave smaller decreases than problem focusing in all three scenarios, eg 4.12 vs 5.84 for lost keys. So it is less effective than problem focusing, and only a moderate decrease was found for lost keys.

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(c) When administering their anxiety questionnaires, Agnetha and Jon followed the British Psychological Society (BPS) Code of Ethics and Conduct (2009).

Describe **one** ethical issue that should be considered when conducting questionnaires.

(2)

Confidentiality: the BPS states participants' data must be kept confidential and anonymous. Anxiety scores are sensitive personal information, so Agnetha and Jon should not record names, should store the questionnaires securely and should only report results without identifying any participant.

(Total for Question 13 = 6 marks)

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14 In health psychology you will have studied one of the following contemporary studies in detail.

- Avdagic et al. (2014) A randomised controlled trial of acceptance and commitment therapy (ACT) and cognitive-behavioural therapy (CBT) for generalised anxiety disorder.
- Russell et al. (2015) Adaptation of an adolescence coping assessment for therapeutic recreation and outdoor adventure settings.

Evaluate your chosen contemporary study.

(8)

Contemporary study *Russell et al. (2015)*

Russell et al. adapted a coping questionnaire for adolescents in outdoor adventure and therapeutic recreation settings. First, 35 adolescents in an adventure therapy programme identified 56 stressors, such as being out of their comfort zone. These stressors were used to adapt the Responses to Stress Questionnaire (RSQ) to the adventure context. The adapted questionnaire was then given to 144 adolescents (78 male, 66 female) aged 13 to 17, sampled from traditional and alternative high schools and an adventure/wilderness therapy programme, and its structure was checked statistically.

A strength is validity: the stressors came from adolescents themselves, so the questionnaire reflects the real stressors young people face in these settings. Adapting the RSQ to context-specific stressors increases construct validity compared with a general stress measure.

The sample was fairly large and drawn from several types of setting, which improves generalisability to adolescents in adventure settings. However, only 49.3% of the sample were white, so cultural differences in coping may not be represented. The data was also self-report, so participants may have given socially desirable answers about how they cope.

The study has useful applications, as therapists can use the questionnaire to assess coping in

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adventure therapy and plan support, although it may not apply to other settings.

Overall, the study produced a valid, context-specific coping measure, but its sample and reliance on self-report limit how widely the findings apply.

(Total for Question 14 = 8 marks)

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15 Assess whether Type A personality can be considered a negative factor affecting stress.

(8)

Type A personality describes people who are competitive, ambitious, impatient with a sense of time urgency, and quickly hostile. Type B people are more relaxed and easy-going. Friedman and Rosenman (1976) claimed Type A people are more susceptible to environmental stressors, as they put themselves under constant pressure, so they have a prolonged stress response and higher risk of coronary heart disease (CHD). In their Western Collaborative Group Study, men classified as Type A by a structured interview were about twice as likely to develop CHD over the follow-up period as Type B men.

This supports Type A as a negative factor: a long-term stress response raises blood pressure and suppresses the immune system, and prolonged stress has been linked to illness such as stomach ulcers (Brady, 1958). The study was large and longitudinal, so the link with CHD is reliable.

However, the evidence is correlational, so Type A may not cause stress-related illness; other factors such as smoking or a high-pressure job may explain both. Ragland and Brand (1988) followed up the same men and found Type A did not predict death from CHD. Myrtek (2001) found that only hostility, not Type A as a whole, was associated with heart disease, suggesting only one component is harmful. The original sample was only middle-aged American men, so it may not generalise to women or other cultures.

Categorising everyone as Type A or Type B is also reductionist, as personality is more complex and other traits such as hardiness (Kobasa) may protect against stress. Some Type A traits can even be positive: competitiveness and time urgency may help people cope with and succeed in high-pressure jobs.

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In conclusion, Type A personality, particularly its hostility component, can be a negative factor affecting stress and health, but the evidence is correlational and inconsistent, so it is one factor among many rather than a direct cause.

(Total for Question 15 = 8 marks)

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

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