Please check the examination details belo	w hefore ente	oring your candidate information
Candidate surname	w Before eme	Other names
Centre Number Candidate Number Pearson Edexcel Intern		al Advanced Level
Tuesday 9 January 2	024	
Afternoon (Time: 1 hour 30 minutes)	Paper reference	WPS03/01
Psychology International Advanced Le UNIT 3: Applications of Ps		gy
You do not need any other material	S.	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 ▶





FORMULAE AND STATISTICAL TABLES

Standard deviation (sample estimate)

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

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.



Chi-squared distribution formula

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

Critical values for chi-squared distribution

Level of	of significance f	for a one-tailed test	
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	0.10	0.05	0.025	0.01	0.005	0.0005
		Level of s	ignificance	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

L	.evel	of	signif	ficance	for a	one-ta	iled	test
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	0.05	0.025	0.01
	Level of sign	ificance for a tw	o-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. Write your answers in the spaces provided.

1	(a) State one aim of the study by Bowlby (1944).	(1)
	(b) Explain one strength of the study by Bowlby (1944).	(2)

(c) Explain one improvement that could be made to the study by Bowlby (1944).	(2)
(Total for Question 1 = 5 r	narks)

2 Andrea carried out an investigation to see whether pre-school children would be able to identify basic shapes more accurately with the help of a more knowledgeable other. The shapes included squares, rectangles, and circles. She gathered a sample of three-year-old children who were available on a Thursday at a local nursery.

Andrea used two groups of three-year-old children.

- Condition A: the children played with different shapes by themselves, putting them into a shape sorter.
- Condition B: the children played with different shapes with a teacher, putting them into a shape sorter after the teacher had named the shape.

After playing for 15 minutes, the children in each group were shown the different shapes and asked the question "what shape is this?". The number of times the correct shape was identified by the children was recorded.

The results gathered by Andrea are shown in **Table 1**.

	Condition A: the children who sorted shapes by themselves	Condition B: the children who sorted shapes with the help of a teacher
Mean number of times the shapes were correctly identified	3	9

Table 1



le				



(b) Explain one conclusion that Andrea can make from the data in Table	1. (2)
(c) Describe one ethical issue that Andrea should have considered when out her research.	she carried (2)
(c) Describe one ethical issue that Andrea should have considered when out her research.	

3	Roberto wanted to investigate whether there was a gender difference in the way that children share their toys. He decided to use a structured observation at a local day care centre.	
	(a) Describe how Roberto could conduct a structured observation into the gender differences in children's toy sharing.	(2)
	(b) Explain one weakness of Roberto using a structured observation to investigate the gender differences in children's toy sharing.	(2)





4	Mrs Adrier has recently been appointed as the mental health and wellbeing support worker at a local high school. She is concerned because there appears to be a breakdown of relationships within some of the friendship groups. Mrs Adrier has also found that a number of students find it difficult to concentrate for long periods of time and become easily distracted. Some students have also reported feeling very stressed.	
	Mrs Adrier would like to introduce a mindfulness programme that will provide sessions that are available for all students. She believes this will benefit them psychologically and improve their social skills.	
	Discuss whether mindfulness can enhance the development of the students at Mrs Adrier's school.	
	You must make reference to the context in your answer.	(8)



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(Total for Question 4 = 8 marks)	
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Assess how far Van iJzendoorn and Kroonenberg's (1988) study on	attachment has
furthered our understanding in psychology.	accaeminent nas
	(8)



(Total for Question 5 = 8 marks)
TOTAL FOR SECTION A = 32 MARKS

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 \boxtimes . If you change your mind, put a line through the box \boxtimes and then indicate your new question with a cross \boxtimes .

If you answer OPTION 1, put a cross in the box $\ \square$.

OPTION 1: CRIMINOLOGICAL PSYCHOLOGY

6	State how attractiveness of the defendant may influence jury decision-making.	
	(Total for Question 6 = 1 mark)	



7	Cognitive behavioural therapy (CBT) is used as a therapy for offenders.
	Explain one strength and one weakness of using cognitive behavioural therapy (CBT) as a treatment for offenders.
	Strength
	Weakness
	(Total for Question 7 = 4 marks)

8	Paulo wants to carry out an investigation at a young offender's institution. He wants to see if an anger management programme is an effective treatment for the young offenders. The programme aims to reduce levels of anger through managing	
	emotions that trigger angry and aggressive behaviour.	
	(a) Describe how Paulo could have used a volunteer sampling technique to gather his participants from the young offender's institution.	(2)
	(b) Explain one weakness of Paulo using a volunteer sample for his investigation.	(2)



(Total for Question 8 = 7 marks)

Paulo asked the young offenders to rate their levels of anger before and after they completed the programme. He used a scale where 1 is low levels of anger and 10 is high levels of anger.	
Paulo carried out a statistical test on the data for before and after the programme to see if there was a significant change in the scores for anger.	
(c) Justify which statistical test Paulo could use on his data.	
	(3)

9	Belinda was walking through the town centre when she heard an alarm ringing from the jewellery shop and lots of people shouting and screaming. As she stopped to look at what was happening, two people ran out of the jewellery shop, pushing her to the ground as they ran past.
	The police have advised Belinda that several pieces of jewellery were stolen from the jewellery shop. They have asked if she would come to the police station to provide a witness statement.
	Explain two ways that stress and trauma may influence the reliability of Belinda's eye-witness memory.
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(Total for Question 9 = 4 marks)

10 Evaluate the self-fulfilling prophecy as an explanation for crime and anti-social behaviour.	
	(8)

11 Assess the usefulness of the cognitive interview technique with witnesses.	(8)

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SECTION B

If you answer OPTION 2, put a cross in the box $\ \square$.

OPTION 2: HEALTH PSYCHOLOGY

	(Total for Question 12 – 1 mark)
12 State how appraisal focusing may be used as a coping	g strategy.

13 Cognitive behav	rioural therapy (CBT) is used	l as a therapy for anxiety	disorders.	
	ngth and one weakness of or anxiety disorders.	using cognitive behaviou	ıral therapy (CBT)	
Strength				
				•••••
Weakness				
		(Total for Qu	estion 13 = 4 marks)	



(a) Describe how Paulo could have used a volunteer sampling technique to gather his participants from the local health centre. (2)	
(b) Explain one weakness of Paulo using a volunteer sample for his investigation. (2)	

Paulo asked the patients to rate their levels of anxiety before and after they completed the programme. He used a scale where 1 is low levels of anxiety and 10 is high levels of anxiety.

Paulo carried out a statistical test on the data for before and after the programme to see if there was a significant change in the scores for anxiety.

(c) Justify which statistical test Paulo could use on his data.

(3)

(Total for Question 14 = 7 marks)



15 Belinda has recently been to visit her doctor as she is experiencing high levels of stress. She has difficulty sleeping and regularly suffers with illnesses such as colds and stomach aches.

The doctor asked Belinda to describe her current situation. She told the doctor that she had moved to a new house because she has recently divorced. Belinda also said that her new neighbours are very noisy, often playing loud music until the early hours of the morning.

Explain **two** ways that life events and daily hassles may have influenced Belinda's levels of stress.

(Total for Question 15 = 4 marks)
2
1



		(8)



(Tot	tal for Question 16 = 8 marks)



17 Assess the use of selective serotonin reuptake inhibitors (SSR anxiety.	ls) as a treatment for
a.m.e.y.	(8)



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