Please check the examination details below before entering your candidate information

Candidate surname	Other names
StemUp Model Solution	

Pearson Edexcel
International
Advanced Level

Centre Number	Candidate Number

Thursday 21 January 2021

Afternoon (Time: 1 hour 30 minutes)	Paper Reference **WPS03/01**

Psychology

International Advanced Level
Paper 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 ▶

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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. Write your answers in the spaces provided.

1 In developmental psychology, you will have learned about the following classic study in detail:

- Van iJzendoorn and Kroonenberg (1988).

(a) Explain **two** strengths of the study by Van iJzendoorn and Kroonenberg (1988).

(4)

1 *It was a meta-analysis of 32 studies using 1,990 Strange Situations, so it used secondary data. This reduces ethical issues, as no new children had to be distressed by being separated from their mothers and left with a stranger in the Strange Situation procedure.*

2 *They used strict criteria for including studies, for example excluding studies where the children were over two years old or the sample was too small. This meant they could accurately compare like with like data about attachment types across the eight countries, increasing the reliability of their comparisons.*

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(b) Explain **one** improvement that could be made to the study by Van iJzendoorn and Kroonenberg (1988).

(2)

They could have included studies from countries in Africa, South America and Eastern European socialist countries, as most of the studies came from the USA and Western Europe. This would make the sample more representative of a cross-cultural population, improving the generalisability of their conclusions.

(Total for Question 1 = 6 marks)

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2 Erica is planning to investigate the effectiveness of baby sign language for communication. She recruited 10 families from her local university. The parents were taught specific hand signals, for example 'milk' and 'teddy bear', during a five-week baby sign language programme.

The child's ability to communicate was assessed before and after the programme.

(a) Describe **two** ethical issues Erica should consider in her investigation.

(2)

1 *Erica must gain informed consent from the parents, as the babies cannot consent, telling them she will be measuring their child's communication ability before and after the programme.*

2 *The children must be protected from harm, as they may become frustrated or distressed if they do not understand the signs, eg 'milk', that their parent is giving them.*

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The communication ability of each child was measured out of 50, with 10 being low ability and 50 being high ability.

The results of Erica's investigation are shown in **Table 1**.

Participant	Communication score before baby sign language programme	Communication score after baby sign language programme
A	12	11
B	13	15
C	41	48
D	35	41
E	28	32
F	21	31
G	14	14
H	32	40
I	17	26
J	20	32

Table 1

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(b) Complete **Table 2** and calculate the Wilcoxon Signed Ranks test for Erica's data.

(4)

Participant	Communication score before baby sign language programme	Communication score after baby sign language programme	Difference	Ranked difference
A	12	11	−1	1
B	13	15	2	2
C	41	48	7	5
D	35	41	6	4
E	28	32	4	3
F	21	31	10	8
G	14	14	0	–
H	32	40	8	6
I	17	26	9	7
J	20	32	12	9

Table 2

Space for calculations

Difference = after − before; G has a difference of 0 so is not ranked, N = 9

Sum of positive ranks = 2 + 5 + 4 + 3 + 8 + 6 + 7 + 9 = 44

Sum of negative ranks = 1 (participant A)

T = the smaller total = 1

Critical value (N = 9, $p \leq 0.05$, two-tailed) = 5

T = 1 ≤ 5, so the result is significant

Wilcoxon T ..... T = 1 .....

(Total for Question 2 = 6 marks)

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3 Florian is interested in children's social development. He would like to use a cross-sectional research method to see how their social development changes over time.

(a) Describe how Florian could use a cross-sectional research method to study the changes in children's social development.

(2)

Florian would gather separate groups of children aged 2, 4, 6 and 8 years at one single point in time. He would observe each group at play and compare how the children interact socially in the different age groups at that moment, to infer how social development changes with age.

(b) Explain **one** weakness of Florian using a cross-sectional research method to study children's social development.

(2)

Florian will be using different children in each age group, so participant variables may affect his findings. Any differences in social development may be due to the children's upbringing, eg having siblings or attending nursery, rather than their stage of development.

(Total for Question 3 = 4 marks)

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4 Ivy is 12 years old and has recently moved with her family from England to France.

Ivy now attends the local school where all her lessons are taught in French. She is having extra French language lessons after school and practises her speaking with her French friends. When she is at home with her parents, she only speaks English and watches English television.

Discuss, using Chomsky's language acquisition device (LAD), why Ivy may be able to speak both languages.

You must make reference to the context in your answer.

(8)

Chomsky argued that children are born with an innate language acquisition device (LAD), which allows any child to learn any language they are exposed to. The LAD contains universal grammar, the rules and characteristics shared by all human languages, such as having nouns and verbs. Chomsky pointed to the poverty of the stimulus: children produce sentences they have never heard, so language cannot just be copied.

This explains why Ivy can speak both languages. She learned English from birth and still speaks it at home with her parents and through English television. Because her LAD already contains universal grammar, she does not need to learn French from scratch; she only needs to set the specific rules of French, so her lessons in French, after-school classes and practice with French friends give her LAD the input it needs.

However, Chomsky also proposed a critical period for language, with the innate ability to acquire language declining around puberty. Ivy is 12 and may be at the onset of puberty, so she may find it harder to master French fluently, especially pronunciation and grammar, than English, which she acquired as a young child. Curtiss (1977) found that Genie, who was not exposed to language until age 13, never fully mastered grammar, supporting a critical period.

The LAD may not be the full explanation. Ivy's French friends may praise or reward her when she speaks French correctly, so her French may also be learned through operant conditioning,

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as Skinner argued. Her teachers correcting her in class would also shape her speech. The LAD cannot be directly observed or measured, so it is hard to test.

Overall, Chomsky's LAD explains why Ivy can learn French so quickly using the universal grammar she already has, while keeping English through daily use at home, but reinforcement from her friends and her age mean the LAD is likely to be only part of the explanation for her bilingualism.

(Total for Question 4 = 8 marks)

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5 Assess whether mindfulness can be considered ethical when used to enhance children's development.

(8)

Mindfulness is a form of meditation in which children learn to focus attention on the present moment in a non-judgemental way. Mindfulness-based interventions in schools aim to improve children's concentration on tasks, and mindfulness-orientated meditation (MOM) can be used to improve emotional wellbeing. Programmes are often delivered by non-specialist practitioners, such as teachers and parents.

Ethical considerations include the social control of children, a vulnerable group who should not be influenced to behave in ways they would not choose for themselves, and whether they can give informed consent and are protected from harm.

Mindfulness can be ethical because it benefits children. Weare (2013) found that mindfulness programmes that were delivered well improved academic learning in children, so they are ethical if delivery is appropriate. Schonert-Reichl and Lawlor (2010) found an improvement in the social and emotional competence of pre-adolescent and adolescent students. However, this was based on teachers' judgements rather than the children's own views of their development, so the benefit, which justifies its use, may be overstated.

There are also ethical concerns. Children may not be fully aware of the implications of taking part, so using mindfulness may breach UNCRC (1989) guidance on child participation and protection. Lustyk et al. (2009) highlighted the need for trained practitioners, as vulnerable participants can suffer adverse side effects such as hallucinations and insomnia, causing harm and distress. If untrained teachers deliver it, children may not be protected.

On the other hand, mindfulness is non-invasive and has fewer risks than drug treatments for

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anxiety, and parents can give consent and children can be allowed to opt out, which reduces the concern about social control.

In conclusion, mindfulness can be considered ethical when it is delivered by trained practitioners, with consent and the right to withdraw, but it is less ethical when imposed on whole classes by untrained staff, so its ethics depend on how it is delivered.

(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 question 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 question with a cross ☒.

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

OPTION 1: CRIMINOLOGICAL PSYCHOLOGY

6 (a) Describe antisocial personality disorder (ASPD) as an explanation of criminal and antisocial behaviour.

(2)

Antisocial personality disorder is a personality disorder linked to abnormalities in the brain, such as reduced prefrontal activity, which lead to impulsive behaviour and a lack of empathy and remorse. This disregard for social norms and the rights of others can lead to criminal and antisocial behaviour.

(b) Justify how antisocial personality disorder (ASPD) can be considered a credible explanation of criminal and antisocial behaviour.

(3)

Brain-imaging techniques can be used to examine structural and functional impairment in people with ASPD, so the explanation can be empirically tested, making it credible. Yang et al. (2008) used fMRI and found that emotional information was not processed in the frontal regions of the brain in individuals with ASPD. Longitudinal studies also add credibility: Simonoff et al. (2004) interviewed 225 childhood twin pairs and found conduct disorder in childhood predicted ASPD in adulthood in those who showed criminal behaviour.

(Total for Question 6 = 5 marks)

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7 Ren is researching whether using the services of a charity that gives support to victims of crime is beneficial to their emotional wellbeing. The charity has given their approval for Ren to work with their service users.

Ren gathered a volunteer sample. He gave them a questionnaire, which included closed questions, to gather data on the impact of the crimes. He also conducted 11 in-depth interviews with the victims of crime.

(a) Describe how Ren may have used a volunteer sampling technique to gather his participants.

(3)

Ren should create an advertisement explaining that he is researching the emotional impact of crime on victims and asking for volunteers. He should place it, with his contact details, on the charity's website or noticeboard. Service users who respond would self-select, and Ren would then agree a time and place to give them the questionnaire and interview them.

(b) Explain **one** strength of Ren using quantitative data for his research.

(2)

Ren used standardised closed questions to gather numerical data from the service users about the impact of the crime. This means he could ask other victims of crime exactly the same questions to retest his findings, making his research replicable and so its reliability can be checked.

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(c) Explain **one** strength of Ren using qualitative data for his research.

(2)

Ren gathered in-depth data in his 11 interviews, allowing the victims to express their own thoughts and feelings about being a victim of crime. This gives him rich, detailed data to analyse, so he can fully understand how the crime and the charity's support affected their emotions, increasing validity.

(Total for Question 7 = 7 marks)

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8 Myrtle has recently completed her training and is now a police officer. She has been asked to conduct her first cognitive interview. She will be using cognitive interviewing techniques that she was taught during her training.

Jared was at the local shopping mall when he saw two men running away from a shoe shop closely followed by a security guard.

Explain **one** strength and **one** weakness of Myrtle using cognitive interviewing techniques with Jared.

(4)

Strength

Myrtle can use techniques such as context reinstatement, asking Jared to picture the shopping mall, the shoe shop and how he felt. Geiselman et al. (1985) found that more correct items were recalled with the cognitive interview than a standard interview, so Jared should give the most accurate account of the two men.

Weakness

Myrtle is newly qualified and this is her first cognitive interview, so she may not be skilled in using the techniques with Jared. Fisher et al. (1989) showed the technique is demanding and needs well-trained interviewers, so she may not achieve successful recall of the events from Jared.

(Total for Question 8 = 4 marks)

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9 In your studies of criminological psychology, you will have learned about the following contemporary study in detail:

- Bradbury and Williams (2013).

Evaluate the study by Bradbury and Williams (2013) in terms of reliability and validity.

(8)

Bradbury and Williams (2013) investigated whether the racial composition of a jury affects verdicts. They used secondary data from real-life trials collected in 2000 and 2001 in four states of America. They analysed trials in which the defendant was black and the jurors were multi-ethnic, and used a number of control variables in their analysis, such as the quantity of evidence, type of charge and sentence. They found that as the proportion of black jurors increased, black defendants were less likely to be convicted.

The study has high ecological validity, as the data came from real trials where real verdicts had serious consequences, unlike mock jury studies where participants know no one will actually be convicted. The data covered many factors in jury decision-making, such as the type of charge, sentence and jury decision, so it reflects real jury behaviour.

However, validity may be reduced by confounding variables that could not be controlled, such as pre-trial publicity and the jurors' previous experience. Because the data were secondary and collected for another purpose, the researchers could not ask jurors why they reached their verdicts, so the conclusion that race caused the verdict may not be valid.

In terms of reliability, it is difficult to obtain data from real trials, as most jury research uses mock trials, so the study is hard to repeat and may be unreliable. However, the use of control variables applied in the same way to every trial makes the analysis more consistent. The findings are also supported by Anwar et al. (2012), who found that black defendants were convicted 81% of the time by white jurors, which increases confidence in the reliability of the

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findings.

Overall, the study is high in ecological validity and its findings are supported by other research, but uncontrolled confounding variables and the difficulty of replicating real-trial data limit both its validity and reliability.

(Total for Question 9 = 8 marks)

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10 Assess the influence of post-event information on the reliability of eyewitness memory.

(8)

Post-event information is information an eyewitness is exposed to after witnessing an event, for example group discussions with other witnesses, leading questions from police, or media coverage of high-profile cases that may contain inaccuracies. According to reconstructive memory, this information can be absorbed into the original memory, leading to errors in recall. Eyewitness testimony is often used in court, after witnesses have been exposed to such information.

There is evidence that post-event information reduces reliability. Loftus and Palmer (1974) found that participants asked how fast the cars were going when they 'smashed' estimated a mean of 40.5 mph, compared with 31.8 mph for 'contacted'. A week later, 32% of the 'smashed' group falsely reported seeing broken glass, compared with 12% of the control group, showing a leading question reconstructed their memory. Gabbert et al. (2003) found that after a post-event discussion, 71% of participants recalled information they had not seen in the video of a girl stealing money from a wallet.

However, these are laboratory studies with low ecological validity, as participants watched videos with no real consequences. In real-life cases, Yuille and Cutshall (1986) found that witnesses to a shooting remained accurate four to five months later and resisted misleading questions, so post-event information did not affect reliability. Similarly, Thompson et al. (1997) found that eyewitness memory of the Marchioness ferry sinking was not inaccurate despite wide-scale media coverage the witnesses would have seen.

The effect may depend on how important the detail is: peripheral details are more easily distorted than central ones, and real witnesses who are emotionally involved may encode the event more strongly.

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In conclusion, post-event information can reduce the reliability of eyewitness memory, especially for peripheral details and in laboratory settings, but real-life evidence suggests its influence is smaller than lab studies suggest, so its effect is not always strong.

(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 (a) Describe Selye's General Adaptation Syndrome (GAS) as an explanation for stress.

(2)

Selye's GAS model identifies three stages in the response to a stressor: the alarm stage, the resistance stage and the exhaustion stage. In the alarm stage the sympathetic nervous system is activated and adrenaline and cortisol are released to prepare the body for fight or flight.

(b) Justify how Selye's General Adaptation Syndrome (GAS) can be considered a credible explanation for stress.

(3)

The GAS model has scientific credibility, as it is based on Selye's (1936) experiments in which rats exposed to different stressors all showed the same pattern of physical responses. Rodrigues et al. (2009) found that the neural structures associated with emotion are altered by stress hormones, supporting the biological basis of GAS. Credibility is also enhanced by animal studies such as Brady (1959), where monkeys exposed to stress declined physically and deaths occurred after 23 days, showing exhaustion is a factor in stress.

(Total for Question 11 = 5 marks)

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12 Ren is researching whether joining a bereavement support group following the death of a loved one is beneficial to emotional wellbeing. His local hospice has given their approval to work with their services users.

Ren gathered a volunteer sample. He gave them a questionnaire, which included closed questions, to gather data on the outcome of the bereavement sessions. He also conducted 11 in-depth interviews with the individuals who had taken part.

(a) Describe how Ren may have used a volunteer sampling technique to gather his participants.

(3)

Ren should create an advertisement explaining that he is researching the emotional impact of bereavement support sessions and asking for volunteers. He should place it, with his contact details, on the hospice website or noticeboard. Service users who respond would self-select, and Ren would then agree a time and place to give them the questionnaire and interview them.

(b) Explain **one** strength of Ren using quantitative data for his research.

(2)

Ren used standardised closed questions to gather numerical data from the service users about the outcome of the bereavement sessions. This means he could ask other bereaved individuals exactly the same questions to retest his findings, making his research replicable and so its reliability can be checked.

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(c) Explain **one** strength of Ren using qualitative data for his research.

(2)

Ren gathered in-depth data in his 11 interviews, allowing the participants to express their own thoughts and feelings about the bereavement sessions. This gives him rich, detailed data to analyse, so he can fully understand how bereavement and the support group affected their emotions, increasing validity.

(Total for Question 12 = 7 marks)

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13 Myrtle is an occupational therapist who specialises in coping strategies. Jared is about to sit a final examination at work and is worried he will not pass. He is not sleeping and now finds it difficult to concentrate, which is making him even more worried.

Jared has been referred to Myrtle and hopes that she can help him cope with managing his stress.

Explain **one** strength and **one** weakness of Myrtle using appraisal focusing as a coping strategy to help Jared.

(4)

Strength

Myrtle can help Jared accept the exam is important but within his control, by changing his negative appraisal (eg 'I will fail') to a positive one. Schmidt et al. (2010) found students using antecedent-focused strategies had more positive emotions when reappraising, so Jared's worry should reduce.

Weakness

Appraisal focusing only works if Myrtle can motivate Jared to rethink the situation, and his personality may affect how he appraises it. As he is not sleeping and finds it hard to concentrate, he may struggle to reappraise, and it does not remove the stressor, as the exam still has to be taken.

(Total for Question 13 = 4 marks)

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14 In your studies of health psychology, you will have learned about the following contemporary study in detail:

- Nakonz and Shik (2009).

Evaluate the study by Nakonz and Shik (2009) in terms of reliability and validity.

(8)

Nakonz and Shik (2009) carried out an ethnographic study over three months of female Filipino migrant domestic workers in Hong Kong. The sample came from five religious groups, and they observed the workers during their Sunday religious gatherings. Information on religious coping was collected by interviewing participants individually and in focus groups. They found that participants improved their emotional wellbeing by using religious reframing of their problems, giving them coping strategies such as patience.

The study has high validity because it was carried out in a natural setting over three months, and the in-depth interviews gave rich qualitative data in the participants' own words, so the findings reflect real experiences of coping. The validity of individual statements was also checked by comparing them with the views of the focus groups, which suggests they were a true reflection of religious coping in the group.

However, the participants were aware that the researcher was observing their behaviour, which may have led to demand characteristics, for example presenting themselves as more religious or better at coping, reducing validity. Interpretation of the qualitative data may also be subjective.

In terms of reliability, the sample consisted of a limited number of religious groups of Filipino migrant workers in a unique situation, so it is difficult to replicate the study and check the consistency of the findings. However, Holroyd et al. (2001) also found that being a member of a religious community improved wellbeing among migrant workers, which supports the

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findings and suggests they are reliable.

Overall, the study is high in ecological validity and its findings are supported by other research, but demand characteristics and the difficulty of replicating such a unique study limit its validity and reliability.

(Total for Question 14 = 8 marks)

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15 Assess the effectiveness of serotonin and norepinephrine reuptake inhibitors (SNRIs) as a treatment for anxiety.

(8)

SNRIs, such as venlafaxine and duloxetine, block both the serotonin transporter (SERT) and the norepinephrine transporter (NET), so less serotonin and norepinephrine are reabsorbed into the presynaptic neuron. This increases levels of both neurotransmitters in the synapse, reducing anxiety. In the short term SNRIs can increase anxiety, and they take one to two weeks to reduce feelings of anxiety and panic. As a drug treatment for generalised anxiety disorder (GAD), they use fewer resources than therapies such as counselling.

There is evidence that SNRIs are effective. Strawn et al. (2018) found that venlafaxine is an effective treatment for GAD and is more effective if taken over 12 months rather than 6 months, as this reduces the chance of relapse. Slee et al. (2019) reviewed 89 trials including 25,441 patients and found a large range of medications can treat GAD, so if a first drug is not successful an alternative is easily available, making drug treatment a cost-effective way to treat anxiety.

However, SNRIs can have more side effects than SSRIs, such as nausea, insomnia and dizziness, because they target norepinephrine as well as serotonin. Some patients may stop taking the medication, making the treatment less effective than SSRIs in practice. The delay before they work and the initial rise in anxiety may also lead patients to give up.

SNRIs also treat the symptoms of anxiety rather than the cause, such as negative thinking, so anxiety may return when medication stops. It is recommended that psychotherapy such as CBT is used alongside them, suggesting they are not as effective as a single treatment.

In conclusion, SNRIs are an effective and cost-effective treatment for anxiety, especially when

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taken long term, but side effects and their failure to address the causes of anxiety mean they work best combined with psychological therapy.

(Total for Question 15 = 8 marks)

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

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