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 17 January 2019

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 criminal 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 Sarah is two years old. She can form short, two- to three-word sentences that are grammatically incorrect.

(a) Give the stage of language development that Sarah is currently in.

(1)

Telegraphic speech stage: she uses a rigid word order to convey meaning but leaves out grammatical words and endings.

(b) Describe, using your understanding of Chomsky, why Sarah makes grammatical errors when forming sentences.

(2)

Chomsky argues Sarah has an innate language acquisition device (LAD) that lets her work out the rules of grammar rather than simply copying the speech she hears. So Sarah is not imitating adults; she is applying the rules she has worked out so far to build her own sentences, and because she has not yet mastered all the rules of her language, her sentences are grammatically incorrect (eg overgeneralising, "I goed").

(Total for Question 1 = 3 marks)

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2 Erikson suggested that individuals progress through psychosocial stages of development during their lifetime. Two of these stages are 'Initiative versus Guilt' and 'Industry versus Inferiority'.

Explain how these **two** psychosocial stages can impact on development.

(4)

Initiative versus Guilt

At about 3 to 5 years the child takes the initiative in play, planning games and starting interactions with other children. If this initiative is encouraged by parents and others, the child develops a sense of purpose and feels secure in making decisions, but if it is criticised or controlled the child develops guilt and may become reluctant to take the lead in future.

Industry versus Inferiority

At about 5 to 12 years the child wants approval from others by showing competence in tasks and skills, eg at school, which builds confidence in their own ability. If this is not supported or praised, the child begins to feel inferior and doubt their ability, so they may lack confidence and not reach their full potential.

(Total for Question 2 = 4 marks)

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3 Jared carried out an investigation into attachment using a questionnaire that contained open-ended questions. He gave the questionnaire to adults aged 25 to 35 years old.

(a) Explain **two** reasons for using open-ended questions in psychological research.

(4)

1 *Open-ended questions place no restrictions on the answers a respondent can give, so they can say exactly what they think about their attachments. This gives the researcher data that is a more valid representation of how the respondents really feel, rather than forcing them into a researcher-chosen category.*

2 *Respondents can answer in as much detail and depth as they feel is necessary to explain their viewpoint. This produces rich qualitative data, so the researcher gains a deeper understanding of the reasons and opinions behind the answers, eg why an adult feels their attachments are secure or insecure.*

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Jared had a total sample of 33 participants, nine of whom were male. The results of his investigation are shown in **Table 1**.

Attachment Type	Male	Female
Type A	3	4
Type B	3	15
Type C	3	5

Table 1

(b) Jared used a chi-squared test to see if there was a significant difference between attachment types in males and females.

Calculate *df* for Jared's chi-squared test by substituting into the formula.

You **must** show your working out.

The formulae and statistical tables can be found at the front of the paper.

(2)

Space for calculations

$df = (r - 1)(c - 1)$

$df = (3 - 1)(2 - 1)$

$df = 2 \times 1 = 2$

df 2

(c) Calculate the ratio of males to females for attachment type B, using the data in **Table 1**.

You **must** give your answer in the lowest form.

(1)

Space for calculations

Type B: males = 3, females = 15

3 : 15 (÷ 3) = 1 : 5

Ratio of males to females for attachment type B 1 : 5

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(d) Explain **one** improvement that Jared could make to the method he used to gather his data.

(2)

Jared could add closed-ended questions, eg rating scales about how close adults feel to their partner, which produce quantitative data that can be objectively measured and analysed statistically. This would reduce the subjectivity of interpreting open answers, giving his findings about attachment greater reliability and credibility.

(Total for Question 3 = 9 marks)

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4 In developmental psychology, you will have learned about one of the following contemporary studies in detail:

- Ashdown and Bernard (2012) Can explicit instruction in social and emotional learning skills benefit the social and emotional development, well-being and academic achievement of young children?
- Ding et al. (2014) The relation of early infant attachment to attachment and cognitive development outcomes in early childhood.

Evaluate your chosen contemporary study from developmental psychology.

(8)

Chosen Study

Ashdown and Bernard (2012)

Ashdown and Bernard (2012) studied 99 children in the preparatory and grade 1 classes of a Catholic school in Melbourne, Australia, with four teachers. The school was identified as low socio-economic status and about two thirds of the children spoke English as a second language. Two classes received the 'You Can Do It! Early Childhood Education' programme, which explicitly teaches social and emotional skills such as confidence, persistence, organisation and getting along, while two classes acted as a control group. Teachers completed the ACER Social-Emotional Well-being Survey and the Social Skills Rating System before and after the programme, and children's reading achievement was also measured.

A strength is that both questionnaires had been used before and shown to have high reliability and validity for measuring children's social and emotional well-being, so the improvements found in the programme groups are likely to be genuine changes rather than measurement error. The pre-test and post-test design with a control group also means changes can more confidently be linked to the programme rather than normal maturation.

However, the teachers knew which group they were in and were the ones rating the children. They may have shown social desirability, rating their own pupils more positively to present

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themselves as 'good teachers', or shown experimenter-type bias in favour of the programme. This reduces the validity of the data, and using independent observers who did not know the conditions would have been more objective.

The sample is also very narrow: one Catholic school in one city, with a low socio-economic intake. The findings may not generalise to other cultures, or to schools in Australia with different socio-economic or religious backgrounds, so we cannot be sure the programme would benefit all young children. On the other hand, the study has practical value, as it suggests schools can improve well-being and achievement in disadvantaged children.

Overall, the study is a useful, reliable test of social and emotional learning, but the teacher ratings and limited sample mean its conclusions should be treated with some caution until replicated with blind raters and a wider range of schools.

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(Total for Question 4 = 8 marks)

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5 Assess whether Punch's (2002) research in Bolivia has furthered understanding in developmental psychology.

(8)

Punch (2002) used an ethnographic approach in a rural community in Bolivia, living with a family and staying in the community for extended periods. She gathered qualitative data by observing and interacting with young people in their classroom settings, using five specially designed task-based methods: drawings, photographs, diaries, worksheets and participatory rural appraisal (PRA) techniques. The study explored how young people negotiate constraints on their choices in the transition to adulthood, such as their rural location, parental attitudes, family background and role models.

Punch's research has furthered understanding because her ethnographic observation and interaction gave detailed insight into youth development in rural Bolivia, a group rarely studied in developmental psychology, which is dominated by Western samples. Because she lived in the community, she took an emic approach, getting close to the culture and lifestyle of the children, so her data reflects how they really develop.

The task-based methods also allowed children to express themselves in their own ways, which suits children who may not be confident in interviews, increasing the validity of the data. The study shows that transitions are underpinned by many interacting factors, which highlights the importance of holistic research in developmental psychology rather than studying single variables.

However, data such as the PRA findings had to be interpreted by Punch, a Western researcher, so they may be culturally biased and reflect her own views. The findings are also specific to one rural Bolivian community, so they may not improve our understanding of development in all cultures, and the qualitative data is hard to replicate, which lowers reliability.

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Overall, Punch (2002) has furthered understanding of how culture and context shape development and of how to research children, but the narrow sample and subjective interpretation limit how far her conclusions can be generalised.

(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 (a) Define what is meant by the term 'anti-social behaviour'.

(1)

Anti-social behaviour is when someone acts in a way that harasses, alarms or causes distress to one or more people who are not in the same household.

(b) Dwayne is listening to music in his garden. His neighbour complains and demands that he turn his music off because he does not like the band. Dwayne refuses to turn the music off. The neighbour becomes very angry and throws a brick at Dwayne's car, smashing the windscreen. A passer-by calls the police.

Describe which behaviour the police would investigate as a criminal offence.

(2)

The police would investigate the neighbour throwing a brick at Dwayne's car as a criminal offence, because smashing the windscreen deliberately damages his property, which breaks the law (criminal damage). Playing music and refusing to turn it off is not a crime in itself.

(Total for Question 6 = 3 marks)

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7 Researchers were interested in the relationship between the attractiveness of an offender and the length of their sentence. They observed local court cases, noting down the attractiveness of an offender on a scale of 0 to 10 (with 10 being the most attractive) and the length of their sentence to the nearest whole year.

(a) Complete **Table 2** and calculate Spearman's rank correlation coefficient.

You **must** give your answer to two decimal places.

The formulae and statistical tables can be found at the front of the paper.

(4)

Attractiveness score out of 10	Rank 1	Length of sentence in years	Rank 2	D	d^2
1	1	10	9	-8	64
3	2	7	7	-5	25
4	3	5	5	-2	4
5	4	8	8	-4	16
8	7	2	2	5	25
6	5	4	4	1	1
9	8	3	3	5	25
7	6	6	6	0	0
10	9	1	1	8	64
				Total:	224

Table 2

Space for calculations

$r_s = 1 - 6\Sigma d^2 \div n(n^2 - 1)$

$n = 9$: $6 \times 224 = 1344$, $9 \times (81 - 1) = 720$

$1344 \div 720 = 1.8667$

$r_s = 1 - 1.8667 = -0.8667 = -0.87$ (2 d.p.)

Spearman's rank correlation coefficient ..... -0.87 .....

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(b) Explain **one** weakness of using a correlational research method to investigate attractiveness and length of sentencing.

(2)

The data only shows a relationship between how attractive the offender was rated and the length of their sentence, not that attractiveness causes the sentence length. So the researchers cannot be certain there is cause and effect, as other variables such as the seriousness of the crime or previous convictions may explain it.

(c) Explain **one** improvement that the researchers could make to this study.

(2)

The researchers could record the nature of the crime the offender is being sentenced for, and compare it with the attractiveness scores and length of sentence. This would allow them to consider a wider range of factors that influence sentencing, so their conclusions about attractiveness would be more valid.

(Total for Question 7 = 8 marks)

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8 Cassie has started to become aggressive with her work colleagues. She has shouted at her boss and slammed a door as someone was walking through it. At home, Cassie is arguing with her husband and has threatened to hit him.

Her husband believes the aggressive behaviour began when Cassie started to watch a new television series about street fighting and crime.

Describe, using social learning theory, how the television series may be influencing Cassie's behaviour.

(5)

Social learning theory (Bandura) suggests Cassie is imitating aggressive behaviour she has observed in the television series. The characters act as role models, and she is most likely to imitate one she identifies with, such as a female criminal or a character of similar age or status.

First Cassie must pay attention to the street fighting and aggression in the series. She then retains it in memory, remembering what the characters did, such as shouting at and threatening others. She then reproduces the behaviour when she has the opportunity, by shouting at her boss, slamming the door and threatening to hit her husband.

Finally, motivation determines whether she repeats it. If the characters were rewarded for their aggression, such as gaining respect, power or control, Cassie experiences vicarious reinforcement and expects the same outcome. If she then feels she gets a reward from her own aggression, such as getting her own way at work or at home, this direct reinforcement means she will continue her aggressive actions.

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(Total for Question 8 = 5 marks)

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9 In criminological psychology, you will have learned about the following classic study in detail:

- Loftus and Palmer (1974) Reconstruction of an automobile destruction: An example of the interaction between language and memory.

Assess the credibility of the study by Loftus and Palmer (1974).

(8)

In experiment 1, Loftus and Palmer (1974) showed 45 undergraduate students seven film segments of road traffic accidents, lasting from 5 to 30 seconds and including both real and staged crashes. After each film they completed a questionnaire asking them to describe the accident and answer specific questions. The critical question asked "About how fast were the cars going when they ___ each other?", with the verb hit replaced by smashed, collided, bumped or contacted. Estimates were highest for smashed (40.8 mph) and lowest for contacted (31.8 mph). In experiment 2, 150 students saw a car crash; one week later, those asked the smashed question were more likely to falsely report seeing broken glass (16 of 50) than the hit (7) or control (6) groups.

The study is credible because it was a controlled laboratory experiment with a standardised procedure, so the verb was the only thing that changed and cause and effect can be established. Some of the clips were staged, so the researchers could check estimated speeds against actual speeds, giving convincing evidence that memory is reconstructed by leading questions rather than accurately recorded.

However, the participants were undergraduate students, who may not represent the varied ages of the general population, and many will have had little driving experience, so their speed estimates may not be a trustworthy measure of how experienced drivers would judge speed.

The task also lacks ecological validity. Watching short film clips is not as emotionally arousing as seeing a real crash, and real witnesses are usually interviewed by police rather than given a

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questionnaire, so the findings may not be believable in real-world eyewitness situations. Participants also knew the outcome had no real consequences, which may have reduced their effort.

Despite this, the effect of the verb change has had a credible real-world impact, as it informed improvements to police interviews such as the cognitive interview, which avoids leading questions. Overall, the study is highly credible in showing that leading questions distort recall in controlled conditions, but less credible as a direct account of real eyewitness memory.

(Total for Question 9 = 8 marks)

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10 Evaluate the effectiveness of cognitive behavioural therapy (CBT) as a therapy for offenders.

(8)

Cognitive behavioural therapy (CBT) aims to change the faulty thought processes that underpin offenders' behaviour, such as hostile attribution bias or justifying crime. The offender works with a therapist to identify and challenge these thoughts, and must commit to tasks such as homework and reflective diaries about their thoughts. Sessions often use role play, acting out scenarios where they could offend, to practise alternative ways to manage the situation. The skills learned can be continued as self-help strategies once therapy is complete.

There is evidence that CBT is effective. Lipsey (2009) analysed 548 studies and found that CBT was more effective in reducing further criminal behaviour than other interventions. Because offenders are taught strategies they can use for life, CBT may reduce recidivism long after treatment ends, which is cheaper and more useful than punishment alone.

CBT is especially effective when offenders want to change their behaviour to rehabilitate themselves and prevent recidivism, as it relies on active participation. However, this is also a weakness: offenders who are unmotivated, or who only attend to appear reformed for parole, may not complete homework honestly, so the therapy will be less effective.

CBT may also be less effective for some offenders and crimes. Changing thought processes may not work where the cause of offending is anti-social personality disorder or biological factors. Howells et al. (2005) found CBT did not significantly reduce aggression in offenders, so it may be less effective for violent crimes such as assault. CBT also focuses on the individual and ignores social causes such as poverty or peer influence.

In conclusion, CBT appears to be an effective therapy for many offenders, particularly motivated

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ones, as shown by large meta-analyses, but its effectiveness depends on the offender and the type of crime, so it may work best combined with other interventions.

(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) Define what is meant by the term 'daily hassles'.

(1)

Daily hassles are day-to-day irritations or frustrations, such as traffic or losing keys, that cause minor stress in everyday life.

(b) Agnetha is getting married next month. She has had to take time off work to cope with the planning for the wedding. On her way to a planning meeting with the caterers at the wedding venue, Agnetha gets stuck in traffic. She is feeling increasingly stressed.

Describe which experience would be considered a life event that could cause Agnetha stress.

(2)

Getting married would be considered a life event that could cause Agnetha stress, because it is a major, significant change to her lifestyle that requires readjustment, eg she will need to consider the needs of her new husband. Getting stuck in traffic is a daily hassle, not a life event.

(Total for Question 11 = 3 marks)

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12 Researchers were interested in the relationship between the number of close friends an individual has and their stress levels. They asked a group of people to state how many close friends they had and to complete a self-report questionnaire to rate their level of stress out of 10 (with 10 being high levels of stress).

(a) Complete **Table 3** and calculate Spearman's rank correlation coefficient.

You **must** give your answer to two decimal places.

The formulae and statistical tables can be found at the front of the paper.

(4)

Number of close friends	Rank 1	Self-rated level of stress score out of 10	Rank 2	D	d^2
1	1	10	9	-8	64
3	2	7	7	-5	25
4	3	5	5	-2	4
5	4	8	8	-4	16
8	7	2	2	5	25
6	5	4	4	1	1
9	8	3	3	5	25
7	6	6	6	0	0
10	9	1	1	8	64
				Total:	224

Table 3

Space for calculations

$r_s = 1 - 6\Sigma d^2 \div n(n^2 - 1)$

$n = 9$: $6 \times 224 = 1344$, $9 \times (81 - 1) = 720$

$1344 \div 720 = 1.8667$

$r_s = 1 - 1.8667 = -0.8667 = -0.87$ (2 d.p.)

Spearman's rank correlation coefficient ..... −0.87 .....

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(b) Explain **one** weakness of using a correlational research method to investigate the number of close friends an individual has and their level of stress.

(2)

The data only shows a relationship between the number of close friends a person has and their stress level, not that one results in the other. So the researchers cannot be certain there is cause and effect between friendship and stress, eg highly stressed people may withdraw and so have fewer friends.

(c) Explain **one** improvement that the researchers could make to this study.

(2)

The researchers could ask participants to explain why they feel stressed, and compare this with their number of friends and stress rating. This would allow them to consider a wider range of factors that influence stress, such as work or money, when drawing conclusions from their data.

(Total for Question 12 = 8 marks)

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13 Cassie has started to feel unwell after being given additional responsibilities at work three months ago. She has had several minor illnesses and has now developed high blood pressure. Cassie feels that she cannot cope with her day-to-day work and is always feeling tired, but finds it difficult to sleep.

Her husband believes the symptoms indicate that Cassie is suffering with stress and thinks she should visit her doctor.

Describe, using physiological explanations of stress, how the additional work responsibilities may result in Cassie experiencing stress.

(5)

Using Selye's general adaptation syndrome, Cassie's additional responsibilities would first trigger the alarm stage, where she registers them as a threat. The hypothalamus activates the sympathomedullary pathway, so the adrenal medulla releases adrenaline, raising her heart rate and blood pressure.

As the extra work has continued for three months, she is in the resistance stage. The HPA axis keeps releasing cortisol from the adrenal cortex, which suppresses the immune system, so she is prone to several minor illnesses. Prolonged stress is also linked to increased amygdala activity, which is associated with raised white blood cell production that can form plaques in her arteries, causing her high blood pressure.

Her constant tiredness suggests she is moving into the exhaustion stage, as her body's resources are depleted after a long period of stress. Her difficulty sleeping, from raised cortisol and arousal, could lead to circadian disruption affecting the prefrontal cortex and her executive functioning, so her day-to-day work seems even harder to cope with.

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(Total for Question 13 = 5 marks)

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

- Nakonz and Shik (2009) And all your problems are gone: religious coping strategies among Phillipine migrant workers in Hong Kong.

Assess the credibility of the study by Nakonz and Shik (2009).

(8)

Nakonz and Shik (2009) studied religious coping among Filipino migrant workers in Hong Kong. The sample was 20 females, mostly domestic workers, aged from their mid-twenties to late forties. Data was gathered through participant observation of charismatic church groups, with field notes, alongside in-depth interviews and focus groups. The workers found coping tools and advice to actively deal with their situations through these churches. Having an external locus of control via God gave spiritual significance to events, making acceptance of hardships easier.

The study is credible because its qualitative methods gave a deep understanding of why the women used religious coping strategies, in their own words. This adds credibility to how well the study embodies their real-life experiences, and using observation, interviews and focus groups allows the findings to be checked against each other.

The findings are also supported by other research. Cruz (2006) suggested that courage, hope and faith are significant to migrant women, showing the importance of religion in their daily lives, which gives credibility to the findings of Nakonz and Shik (2009).

However, the sample was only 20 females, so the results cannot be generalised to the wider population of migrants, as males are excluded, reducing the credibility of the data as a reflection of religious coping. The researchers' interpretation of the qualitative data may also be subjective. Epstein and Mealem (2010) found that interaction with local workers and production activities at work increased the assimilation of migrants, showing alternatives to religion, which decreases the credibility of the conclusion that religion is the key coping strategy.

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Overall, the study is credible as a detailed account of how these women cope, but its small, female-only, religious sample means it is less credible as an explanation of how all migrant workers cope with stress.

(Total for Question 14 = 8 marks)

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15 Evaluate whether individual differences can affect stress.

(8)

Individual differences in personality may affect how much stress people experience. A Type A personality is competitive, aggressive, impatient and has a strong drive for success. Type A individuals tend to rely on external rewards such as wealth, status or power, and spend less time on personal relationships. Perfectionism is a trait where an individual strives for flawlessness and has excessively high standards and expectations. Psychodynamic explanations argue that stress is an unconscious process managed by defence mechanisms such as repression.

Friedman and Rosenman's Western Collaborative Group Study followed over 3000 men and found that Type A men were about twice as likely to develop coronary heart disease as Type B men, supporting the idea that personality affects stress and its effects on health. Type A individuals are also likely to have smaller relationship networks and less social support, so their stress levels could be higher than those with support.

However, Denollet and Conraads (2006) suggest it is Type D individuals, who experience negative emotions and inhibit emotional expression in interactions, whose personality is significantly related to stress and an increased risk of a major cardiac event, so Type A is not the only individual difference linked to stress.

Research on perfectionism is also mixed. Stoeber and Rennert (2008) found that striving for perfection itself was not linked to higher stress or burnout in teachers; it was perceived pressure to be perfect and concern about others' reactions to imperfections that were linked to stress. Perfectionism and Type A also do not explain why people without these traits experience stress, unlike psychodynamic explanations, although these are hard to test.

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In conclusion, individual differences can affect stress, but the relationship depends on which aspect of personality is involved, and situational factors such as social support also play a major role.

(Total for Question 15 = 8 marks)

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

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