

Mark Scheme (Results)

October 2018

Pearson Edexcel International GCE
In Psychology (WPS03 01)
Paper 3: Applications of Psychology



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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

DEVELOPMENTAL PSYCHOLOGY

Question Number	Answer	Mark
1	**AO1 (2 marks), AO3 (2 marks)** Credit up to **two** marks for accurate identification (AO1) Credit up to **two** marks for exemplification/justification (AO3) For example: • Maternal deprivation can lead to not developing a basis for positive emotional relationships which leads to delinquency (1). Bowlby (1944) found that 17 of the 44 juvenile thieves considered delinquent had experienced maternal deprivation (1). Children may develop emotional disturbances/mental health problems leading to a lack of affection (1), shown by 12 of the 17 juvenile thieves being 'affectionless' and showing no empathy or guilt (1). **Look for other reasonable marking points.**	**(4)**

Question Number	Answer	Mark
2(a)	**AO2 (1 mark)** Credit **one** mark for an accurate identification from the scenario • Independent measures/groups design (1) **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
2(b)	**AO2 (2 marks)** Credit **one** mark for each correct percentage in whole numbers • Percentage of children in Condition B giving a **correct** answer = **16%** • Percentage of children in Condition B giving an **incorrect** answer = **32%** **Reject all other answers.**	**(2)**

Question Number	Answer	Mark
2(c)	**AO2 (4 marks)** Credit **one** mark for accurate completion of **O-E** column to two decimal places Credit **one** mark for accurate completion of **$(O-E)^2$** column to two decimal places Credit **one** mark for accurate completion of **$(O-E)^2/E$** column to two decimal places Credit **one** mark for correct **chi-squared** to **two** decimal places = **8.47**	**(4)**

		Observed	Expected	O-E	$(O-E)^2$	$(O-E)^2/E$
Condition A Children working in pairs with 15-year-olds	Correct answer	16	11.58	**4.42**	**19.54**	**1.69**
	Incorrect answer	4	8.42	**-4.42**	**19.54**	**2.32**
Condition B Children working alone	Correct answer	6	10.42	**-4.42**	**19.54**	**1.88**
	Incorrect answer	12	7.58	**4.42**	**19.54**	**2.58**
				Chi-squared =		**8.47**

Question Number	Answer	Mark
2(d)	**AO2 (2 marks), AO3 (2 marks)** Credit up to **two** marks for accurate application to scenario (AO2) Credit up to **two** marks for justification/exemplification (AO3) For example: • The 15-year-old working with the 8-year-old can give cues when the child is stuck on the mathematical puzzle (1) this would be scaffolding the child while they work through their zone of proximal development to achieve their potential (1). Whereas the child working on their own would only be able to complete the parts of the puzzle they already understood (1) as they would be working at their present level with no help being given to reach their potential (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
2(e)	**AO3 (1 mark)** Credit **one** mark for accurate suggestion of an improvement in relation to scenario. For example: • Charlotte could take a baseline measure of the children's mathematical skills to match the two groups equally on present ability (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(1)**

Question Number	Indicative Content	Mark
3	**AO1 (4 marks), AO2 (4 marks)** **AO1** • According to Skinner children are a 'tabula rosa' for language learning and require nurturing. • Language is learnt through processes of operant conditioning using reinforcement. • Correct words are rewarded with positive reinforcement to encourage continuation of the utterances. • Incorrect words can be positively punished to discourage the use of the inaccurate speech. **AO2** • Adham did not know the word 'daddy' until his father nurtured and taught him to say this word. • The operant conditioning positive reinforcements received by Adham for correct words are hugs, smiles and clapping which he desired from his parents. • Adham receives hugs from his mother that encourages his continued use of saying the word 'mummy' correctly to her. • When Adham says the word 'mummy' to his father he received positive punishment by being told 'no' which he does not desire so he eventually stops saying the incorrect word and learns the new word of 'daddy'. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
AO1 (4 marks), AO2 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer.		
	0	No rewardable material
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Discussion is partially developed, but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures (AO2)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2)

Question Number	Indicative Content	Mark
4	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Attachment types can be investigated using the strange situation procedure (SSP) developed by Ainsworth. • Classifying attachment by typologies, such as secure (Type B), suggests attachment is a universal law of development. • Individual differences in the temperament of a child can affect their attachment to their caregiver leading to subjectivity in research. • The strange situation procedure reduces attachment to the behaviours observed within the controlled observation setting. **AO3** • The SSP is structured and highly controlled, so eliminates any situational variables, which increases scientific credibility. • Cassibba et al. (2001) replicated the SSP to measure attachment types in Italy suggesting typologies can be measured scientifically as they are objective universal laws. • Fuertes et al. (2006) found individual differences to be a factor in the formation of attachment, so research using the SSP may not be scientific as it cannot eliminate this subjectivity. • Reductionism increases the scientific nature of the SSP as attachment behaviours can be operationalised and empirically observed. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer.**		
	0	No rewardable material.
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

CRIMINOLOGICAL PSYCHOLOGY

Question Number	Answer	Mark
5	**AO1 (2 marks)** Credit up to **two** marks for an accurate statement. For example: • Explaining the possible causes of crime and anti-social behaviour in society (1) and the issues around the effectiveness of treatments for offenders (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
6(a)	**AO2 (1 mark) AO3 (1 mark)** Credit **one** mark for accurate identification of a reason in relation to the scenario (AO2) Credit **one** mark for justification/exemplification of the reason (AO3) For example: • The closed questions about CBT will give Enzo quantitative data to analyse (1) which means he can use statistical testing to determine the significance of the results he gathers (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
6(b)	**AO2 (1 mark) AO3 (1 mark)** Credit **one** mark for accurate identification in relation to the scenario (AO2) Credit **one** mark for justification/exemplification (AO3) For example: • Enzo could conduct all the unstructured interviews in a specified room of the prison to control extraneous variables such as interruptions from other offenders (1) which will improve the reliability of the data gathered as it reduces the chances of confounding variables affecting the interview process (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
6(c)	**AO2 (1 mark) AO3 (1 mark)** Credit **one** mark for accurate identification of improvement in relation to the scenario (AO2) Credit **one** mark for justification/exemplification (AO3) For example: • Enzo could interview other offenders who have undertaken CBT treatment in different prisons or have been released from prison (1) this will increase the representativeness of his participant group to a wider population of offenders (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
6(d)	**AO2 (2 marks) AO3 (2 marks)** Credit **one** mark for each accurate identification of an ethical issue in relation to the scenario (AO2) Credit **one** mark for justification/exemplification of each ethical issue (AO3) For example: • Enzo would need to consider the risk to himself and other offenders when conducting the interviews within the prison (1) so he must follow the BPS (2009) protocols for risk management when he is designing his research (1) • To avoid deception, Enzo should explain the aim of his research to the offenders and the prison service before he begins (1) this is because the BPS (2009) requires researchers to give as much information as possible to those who are taking part in their research (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
6(e)	**AO2 (1 mark) AO3 (1 mark)** Credit **one** mark for each accurate identification in relation to the scenario (AO2) Credit **one** mark for justification/exemplification of each (AO3) For example: • Enzo may find that the offenders show a reduction in recidivism once they have been released from prison (1) as Wilson et al. (2005) found in their meta-analysis that CBT reduced recidivism by up to 30% when compared to non-treatment groups (1). • Enzo could also find that the effectiveness of CBT with the offenders does not have long-term success (1). Levy et al. (2014) found that it was important to deal with the underlying problems such as joblessness and poverty, which CBT does not change (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Indicative Content	Mark
7	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Personality explanations include anti-social personality disorder which explains behaviour as a form of innate pathology in brain functioning. • Personality explanations are nature orientated and focus on differences with the individual. • People with anti-social personality disorder can be deceitful and reckless. • Anti-social personality disorder requires a clinical diagnosis to be made from a standard set of signs and symptoms. **AO3** • Yang (2008) found anti-social individuals had an impaired amygdala-hippocampal system which is credible as it can be empirically tested. • Studies like Jahoda (1954) only give correlational links between labelling and behaviour so are less credible than personality explanations. • Labelling an individual with a pathologically criminal personality could lead to a self-fulfilling prophecy, which suggests personality disorders are less credible because they do not consider external factors. • ASPD can be clinically identified giving it scientific credibility due to empirical testing of clearly identifiable traits. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer.**		
	0	No rewardable material.
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Question Number	Indicative Content	Mark
8	**AO1 (4 marks), AO3 (4 marks)** **AO1** • The race of the jurors may affect their perceptions of the defendants with jurors who are a different race to the defendant being more likely to convict them. • Pre-trial publicity in the media about the defendant/crime/victim before the trial can influence jury decisions during the case. • Investigating jury decision-making is often done through mock jury trials which replicate a court trial. • Evidence in trials presented by experts could bias the jurors towards the individual testimonies of those in high regard, like police officers. **AO3** • Bradbury and Williams (2013) found juries with a high percentage of white jurors were more likely to convict black defendants so decisions are not objective. • Ruva, McEvoy and Bryant (2007) found that negative pre-trial publicity had a biasing effect on juror impressions of the defendant. • A mock jury trials use video recorded trials so may not reflect real life trials as it lacks ecological validity, so jurors may be more objective where there are higher stakes and real people involved. • Penrod and Cutler (1989) found jurors are influenced by the confidence/expertise of the eyewitnesses so their decisions are not objective. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

HEALTH PSYCHOLOGY

Question Number	Answer	Mark
9	**AO1 (2 marks)** Credit up to **two** marks for an accurate statement. For example: • Looking at health issues like stress from a range of perspectives, such as biological and social explanations (1) to develop treatment and therapies to promote good health and wellbeing (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
10(a)	**AO2 (1 mark) AO3 (1 mark)** Credit **one** mark for accurate identification of a reason in relation to the scenario (AO2) Credit **one** mark for justification/exemplification of the reason (AO3) For example: • The closed questions about CBT will give Enzo quantitative data to analyse (1) which means he can use statistical testing to determine the significance of the results he gathers (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
10(b)	**AO2 (1 mark) AO3 (1 mark)** Credit **one** mark for accurate identification in relation to the scenario (AO2) Credit **one** mark for justification/exemplification (AO3) For example: • Enzo could conduct all the unstructured interviews in a specified room in the counselling service to control extraneous variables such as interruptions from other clients (1) which will improve the reliability of the data gathered as it reduces the chances of confounding variables affecting the interview process (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
10(c)	**AO2 (1 mark) AO3 (1 mark)** Credit **one** mark for accurate identification of improvement in relation to the scenario (AO2) Credit **one** mark for justification/exemplification (AO3) For example: • Enzo could interview other patients who have undertaken CBT treatment in different counselling services or have been treated in hospitals (1) this will increase the representativeness of his participant group to a wider population of patients with anxiety (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
10(d)	**AO2 (2 marks) AO3 (2 marks)** Credit **one** mark for each accurate identification of an ethical issue in relation to the scenario (AO2) Credit **one** mark for justification/exemplification of each ethical issue (AO3) For example: • Enzo would need to consider the health risks to the patients with anxiety when conducting the interviews within the counselling service (1) so he must follow the BPS (2009) protocols for risk management when he is designing his research (1) • To avoid deception, Enzo should explain the aim of his research to the patients with anxiety and the counselling service before he begins (1) this is because the BPS (2009) requires researchers to give as much information as possible to those who are taking part in their research (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
10(e)	**AO2 (1 mark) AO3 (1 mark)** Credit **one** mark for each accurate identification in relation to the scenario (AO2) Credit **one** mark for justification/exemplification of each (AO3) For example: • Enzo could also find that the effectiveness of CBT with the patients has long-term successes (1). DiMauro et al. (2012) found that patients with anxiety had maintained their success one year after treatment had been completed (1). • Enzo may find that the effectiveness of CBT for anxiety disorders is limited because it does not deal with underlying causes (1). Whereas therapies such as psychoanalysis may be more effective than CBT as they address the unconscious processes causing the anxiety (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Indicative Content	Mark
11	**AO1 (4 marks), AO3 (4 marks)** **AO1** • The hormone cortisol is released from the adrenal glands in response to stress. • Selye's GAS model, the initial alarm stage when a person registers a threat creates a hormonal change. • Excessive cortisol can impact on cognitive processes such as memories, resulting in more things being perceived as stressors. • There is an increase in adrenaline when an individual experiences a stressful situation. **AO3** • Cortisol levels can be empirically tested using objective measures such as blood tests increasing the credibility of the link to stress. • Rodrigues et al. (2009) suggested that stress hormones alter the neural structures that are associated with emotion, so Selye's explanation has scientific credibility. • The HPA Axis is what leads to the release of cortisol, so it may be more credible that brain functioning explains stress responses. • The Holmes and Rahe stress scale measures life events, which suggests there is more to stress than hormonal changes so it not fully credible as an explanation of stress. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs assessment/conclusion in their answer.**		
	0	No rewardable material.
Level 1	1–2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) Generic assertions may be presented. Limited attempt to address the question. (AO3)
Level 2	3–4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)
Level 3	5–6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this may be imbalanced. (AO3)
Level 4	7–8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates an awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)

Question Number	Indicative Content	Mark
12	**AO1 (4 marks), AO3 (4 marks)** **AO1** • The Holmes and Rahe stress scale is a self-report measure that relies on an individual's personal responses. • The scale is used to test stress and can be analysed using pre-determined/previously agreed scoring mechanisms. • The self-report scale relies on truthful information being provided by the respondents about their life events. • There are points given based on the severity of life events, such as 100 points for the death of a spouse. **AO3** • The use of standardised life event statements reduces researcher bias from the analysis therefore making it more objective. • There is consistency shown by the Holmes and Rahe stress scale as it has been used over time and remains a valid tests of stress, thus not influenced by subjective interpretations. • Social desirability may mean respondents give answers they believe would show them in a better light, therefore this measure of stress may be subjective. • Having a fixed list of life events can exclude daily hassles, such as traffic jams, so it does not measure all factors affecting stress, so is subjective. **Look for other reasonable marking points.**	**(8)**

Level	Mark	Descriptor
AO1 (4 marks), AO3 (4 marks) **Candidates must demonstrate an equal emphasis between knowledge and understanding vs evaluation/conclusion in their answer.**		
	0	No rewardable material.
Level 1	1-2 Marks	Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)
Level 2	3-4 Marks	Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)
Level 3	5-6 Marks	Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)
Level 4	7-8 Marks	Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3)

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