GradeMax



Mark Scheme (Results)

January 2018

Pearson Edexcel International GCE In Psychology (WPS03)

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.

Section A: Social Psychology

Question Number	Answer	Mark
1	**AO2 (4 marks)** Credit up to **four** marks for accurate description in relation to the scenario. For example: • Operant conditioning would suggest that food provided by Lorenzo's mother satisfies his hunger and is therefore a primary reinforcer (1). Being fed makes him feel comfortable which would be positive reinforcement for Lorenzo (1). The mother is associated with food and becomes a secondary reinforcer (1). Lorenzo becomes attached to the mother because she is a source of reward (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
2(a)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate use of data (AO2). Credit **one** mark for accurate conclusion (AO3). For example: • Thirty infants formed their first specific attachment aged 6 to 8 months (1) therefore, specific attachments tend to be formed before an infant is 9 months old (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
2(b)	**AO1 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of strength (AO1). Credit **one** mark for justification of the strength (AO3). For example: • They take place in the participants' natural setting without the situation being artificial (1), increasing validity because they observe children's behaviour in their natural environment (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
2(c)	**AO1 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of weakness (AO1). Credit **one** mark for justification of the weakness (AO3). For example: • The dropout rate in longitudinal studies can be high (1), therefore affecting the representativeness of the sample and reducing generalisability (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
3(a)	**AO2 (2 marks)** Credit **two** marks for a **fully** accurate suggestion in relation to the scenario. Credit **one** mark for a **partially** accurate suggestion in relation to the scenario. For example: • Put the names of all the infants aged 12 to 18 months who are on the children's ward into a container (1) and pick out ten infants' names in an unbiased way (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
3(b)	**AO3 (2 marks)** Credit up to **two** marks for an accurate justification. For example: • A random sample is likely to be more representative of the target population than a volunteer sample (1), because volunteer samples consist of people who are interested in taking part in research so are biased and less reliable (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
3(c)	**AO1 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of demand characteristic (AO1). Credit **one** mark for justification of demand characteristic (AO3). For example: • Parents may change their behaviour to meet the perceived expectations of the researcher (1). Parents may be more attentive to the child than they normally would making the results unreliable (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Indicative Content	Mark
4	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Vygotsky described ZPD as the gap between what children can achieve by themselves and what they can learn with help. • More knowledgeable others (MKO) can provide scaffolding to help a child learn. • A teacher/peer may demonstrate an intellectual concept to guide the child through learning a skill set. • Mastering speech when learning language requires adult/peer socialisation. **AO3** • The zone of proximal development is an internal process which cannot be empirically tested or observed, making the theory less scientific. • Dunn and Munn (1987) found social interaction in play enhances cognitive development, which provides evidence that scaffolding helps children learn. • Vygotsky's ZPD can be applied to educational contexts in order to help children learn intellectual concepts, therefore it has validity. • Chomsky believed learning language was an innate human trait where we are predisposed to acquire linguistic skills, therefore socialisation is over emphasised by Vygotsky. **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)

Question Number	Indicative Content	Mark
5	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Primary research is gathered first hand by the researchers using methods such as observations. • Secondary research is using data produced for other purposes, such as medical records. • Studying children directly may require researchers to expose them to experimental conditions. • Consent for primary research with children is obtained from their parents. **AO3** • Ainsworth's strange situation procedure gathers primary data resulting in better understanding of emotional attachment types, which would not be possible through secondary research. • Van iJzendoorn and Kroonenberg (1988) conducted a meta-analysis of attachment research, so secondary data is useful for comparing studies of emotional development cross-culturally. • Bandura, Ross and Ross (1961) exposed children to aggressive role models to study social development, so gathering primary data may have emotionally harmed the children. • Watson and Rayner (1920) had informed consent from Little Albert's mother to study his emotional reactions, whereas using secondary data does not require consent as it was gained at the time of research. **Look for other reasonable marking points.**	**(8)**

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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)
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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	Answer	Mark
6	**AO2 (2 marks)** Credit up to **two** marks for an accurate description in relation to scenario. For example: • Kris could have identified with the violent television programmes he watched (1). He may have witnessed aggressive characters receiving vicarious reinforcement in the programmes (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
7(a)	**AO2 (1 mark)** Credit **one** mark for an accurate statement in relation to scenario. For example: • Cognitive behavioural therapy leads to a 55% reduction in reoffending (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(1)**

Question Number	Answer	Mark
7(b)	**AO2 (1 mark)** Credit **one** mark for correct answer. • **21** **Reject all other answers.**	**(1)**

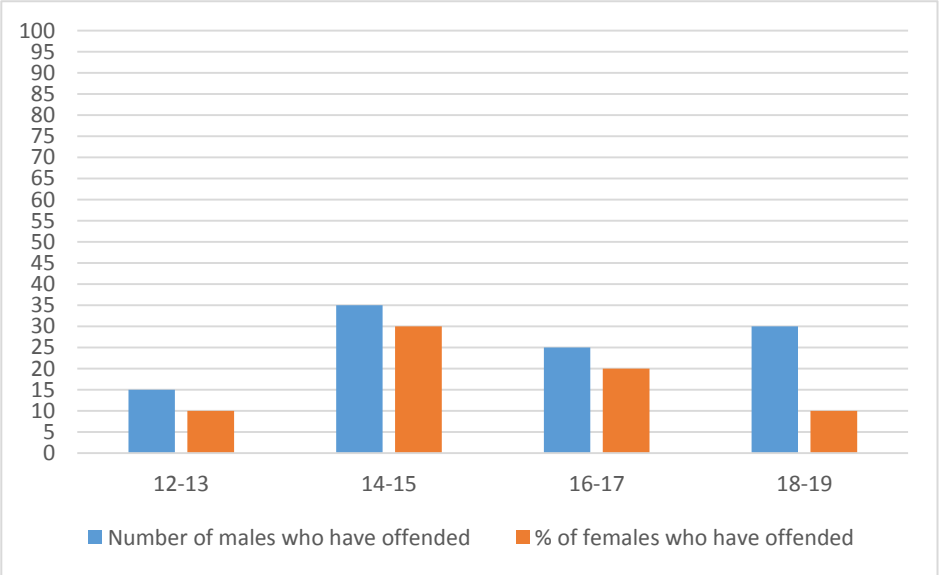
Question Number	Answer	Mark
7(c)	**AO1 (1 mark), AO2 (1 mark)** Credit **one** mark for an accurate identification (AO1). Credit **one** mark for an accurate description in relation to scenario (AO2). For example: • The researchers would be required to gain informed consent (1) by asking the offenders taking part in the treatment programmes to agree to be part of the research (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
7(d)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for each accurate reason in relation to scenario (AO2). Credit **one** mark for the justification of each reason (AO3). For example: • The offenders may not have been able to withdraw from research if the therapy was a requirement of their sentencing (1), however the benefit to society of developing effective offender treatment would outweigh the ethical concerns (1). • Offenders undertaking the control condition are not being given CBT so may be harmed by proxy if their offending behaviour is left untreated (1) however the punishment of being caught from a crime could be argued to be enough to prevent reoffending so recidivism would be their choice and not a result of the study (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
8(a)(i)	**AO2 (2 marks)** Credit **one** mark for correct completion of **age in years**. Credit **one** mark for correct completion of **number of males who have offended**. **Look for other reasonable marking points.**	**(2)**

Age in years	Number of males who have offended	Number of females who have offended
12-13	**15**	5
14-15	**35**	15
16-17	**25**	10
18-19	**30**	5

Question Number	Answer	Mark
8(a)(ii)	**AO2 (1 mark)** Credit **one** mark for accurate **plot of percentage of females who have offended.** **Look for other reasonable marking points.**	**(1)**



Question Number	Answer	Mark
8(b)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of weakness in relation to scenario (AO2). Credit **one** mark for justification of weakness (AO3). For example: • The participants may have wanted to please Grazvydas and Hanna so they may have answered falsely about their offending (1), therefore any conclusions about offending become unreliable due to inaccurate data (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
8(c)	**AO2 (1 mark)** Credit **one** mark for accurate suggestion of improvement in relation to scenario. For example: • Grazvydas and Hanna could use open questions in their questionnaire so participants can describe their offending behaviour in detail (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(1)**

Question Number	Indicative Content	Mark
9	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Leading questions can influence eye witness memory and produce errors in recall. • When a weapon is used by a criminal the witnesses focus on the weapon rather than the criminal's face. • People are less able to recognise people from a different ethnic background to themselves. • If there is a long period of time between recall and the incident, people are likely to forget details. **AO3** • Loftus and Palmer (1974) found that they could affect participants' recall by changing the way a question is worded so eye witness memory is unreliable. • Loftus et al. (1987) found that participants had worse recall for the customer's face when they were holding a weapon, this reduces eye witness accuracy. • Meissner and Brigham (2001) found that false identification was common, therefore witnesses have an own race bias, reducing accurate memory recall. • Yuille and Cutshall (1986) found no variation in eye witness accuracy 5 months after the event, therefore eye witness memory of real crime can be reliable. **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)

Question Number	Indicative Content	Mark
10	**AO1 (4 marks), AO3 (4 marks)** **AO1** • Anti-social personality disorder can be caused by brain abnormalities. • Anti-social personality disorder is a form of innate pathology in brain functioning such as the prefrontal cortex. • Social learning theory would suggest criminal and anti-social behaviour is learned from role models. • Criminal and anti-social behaviour may be a result of unresolved psycho-sexual stages in childhood. **AO3** • Yang (2008) found that anti-social individuals had impaired amygdala-hippocampal systems in brain, therefore ASPD can be linked to criminal behaviour because of reduced emotional responses. • The labelling of an individual as pathologically criminal could lead to a self-fulfilling prophecy, which could actually be what causes criminal behaviour. • Anderson and Dill (2000) found a correlation between violent video games and increased aggression which would suggest the criminal and anti-social behaviour is a result of media rather than ASPD. • Freud claimed that the death instinct of Thanatos explains motivations that underpin aggressive, criminal and anti-social behaviours, so it is not a personality disorder. **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)
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Question Number	Answer	Mark
11	**AO2 (2 marks)** Credit **one** mark for identification of each factor in relation to scenario (AO2). For example: • The unpredictability of the calls received (1). • The environment is too busy to work (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
12(a)	**AO2 (1 mark)** Credit **one** mark for an accurate statement in relation to scenario. For example: • Stress triggers were found to increase stomach acidity levels in 80% of studies (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(1)**

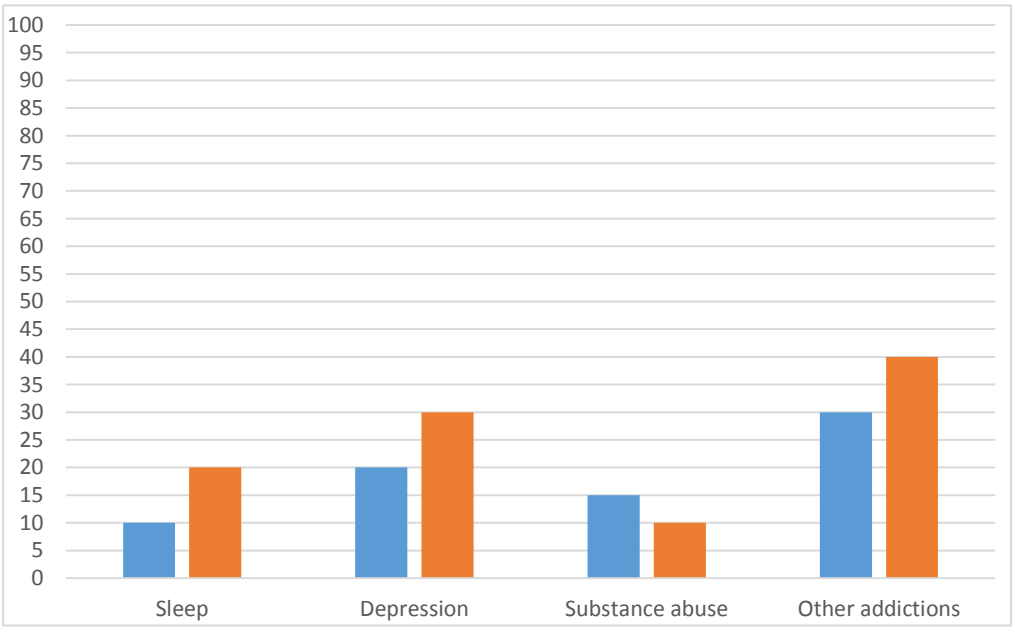
Question Number	Answer	Mark
12(b)	**AO2 (1 mark)** Credit **one** mark for correct answer. • **15** **Reject all other answers.**	**(1)**

Question Number	Answer	Mark
12(c)	**AO1 (1 mark), AO2 (1 mark)** Credit **one** mark for accurate identification (AO1). Credit **one** mark for accurate description in relation to scenario (AO2). For example: • The suffering of the animals must be minimised (1) by ensuring the stomach acidity levels do not reach dangerous levels (1). **Look for other reasonable marking points.**	**(2)**

Question Number	Answer	Mark
12(d)	**AO2 (2 marks), AO3 (2 marks)** Credit **one** mark for each accurate reason in relation to scenario (AO2). Credit **one** mark for the justification of each reason (AO3). For example: • The animals were exposed to stress triggers that could have caused distress to human participants (1). This would not have been possible due to the BPS ethical guidelines and code of conduct (2009) which prevents research into stomach acidity on humans (1). • Animals would be less susceptible to extraneous variables that could affect stress triggers/stomach acidity (1). They are housed in controlled laboratory environments which strengthens cause and effect conclusions between stress and stomach acidity (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(4)**

Question Number	Answer	Mark
13(a)(i)	**AO2 (2 marks)** Credit **one** mark for correct completion of **lifestyle characteristic**. Credit **one** mark for correct completion of **number of males.** **Look for other reasonable marking points.**	**(2)**

Lifestyle characteristic	Number of males	Number of females
Sleep	**10**	10
Depression	**20**	15
Substance abuse	**15**	5
Other addictions	**30**	20

Question Number	Answer	Mark
13(a)(ii)	**AO2 (1 mark)** Credit **one** mark for accurate **plot of percentage of females with negative lifestyle characteristics**  **Look for other reasonable marking points.**	**(1)**

Question Number	Answer	Mark
13(b)	**AO2 (1 mark), AO3 (1 mark)** Credit **one** mark for accurate identification of weakness in relation to scenario (AO2) Credit **one** mark for justification of weakness (AO3) For example: • Respondents may give false responses about their lifestyle due to social desirability (1) which would reduce the validity of the data gathered about health and lifestyle (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(2)**

Question Number	Answer	Mark
13(c)	**AO2 (1 mark)** Credit **one** mark for accurate suggestion of improvement in relation to scenario. For example: • Rebekah and Caleb could use open questions in their questionnaire so participants can describe lifestyle characteristics (1). **Look for other reasonable marking points.** **Generic answers score 0 marks.**	**(1)**

Question Number	Indicative content	Mark
14	**AO1 (4 marks), AO3 (4 marks)** **AO1** • In the Selye's GAS model, the initial alarm stage is when a person registers a threat and creates a hormonal change. • Exhaustion can occur if the body is repeatedly stressed or the stress is long lasting. • Selye's research evidence came mostly from his studies using animals such as rats. • Cognitive psychologists would explain stress as a result of negative and faulty thought patterns. **AO3** • Rodriques et al. (2009) suggested that stress hormones alter the neural structures that are associated with emotion, so Selye's explanation has scientific credibility. • Brady (1958) found that the monkeys exposed to stress physically deteriorated and began to die after 23 days from their stress, so Selye's explanation of exhaustion has supporting evidence. • Animal research supporting the GAS explanation could be ungeneralisable to the human population as animals may not represent human reactions to stress. • Beck and Weishaar (2010) used cognitive techniques to treat faulty thinking and cognitive bias showing cognitive factors could cause stress and it may not be a result of GAS. **Look for other reasonable marking points.**	**(8)**

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Question Number	Indicative content	Mark
15	**AO1 (4 marks), AO3 (4 marks)** **AO1** • The treatments assume anxiety is a physiological condition caused by, for example, neurotransmitter dysfunction. • Symptoms of anxiety can include irritability, concentration difficulty and sleep disturbance. • Drug treatments such as SSRIs and SNRIs have been found to be effective in treating anxiety. • Cognitive Behavioural Therapy (CBT) is non-invasive and can be used to treat anxiety. **AO3** • Soomro (2009) found that SSRIs reduce the severity of anxiety symptoms, therefore biological treatments are effective. • Effective management of anxiety symptoms can help a patient cope with day to day life therefore enabling them to adequately function and find ways to deal with anxiety triggers, so are effective. • Tyrer and Baldwin (2006) suggest that antianxiety treatments can result in dependency, so are ineffective as they have significant side effects to the patient. • Alternatives such as CBT have been proven to be equally as effective as biological treatments with anxiety (Tyrer and Baldwin, 2006), so ethically a non-invasive option should be provided to patients for their safety before drugs are considered. **Look for other reasonable marking points.**	**(8)**

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