

Mark Scheme (Results)

June 2015

Pearson Edexcel GCE in Psychology (6PS03/01)

Unit 3: Applications of Psychology

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#### General Guidance on Marking-GCE Psychology

All candidates must receive the same treatment.

Examiners should look for qualities to reward rather than faults to penalise. This does NOT mean giving credit for incorrect or inadequate answers, but it does mean allowing candidates to be rewarded for answers showing correct application of principles and knowledge.

Examiners should therefore read carefully and consider every response: even unconventional answers may be worthy of credit.

Candidates must make their meaning clear to the examiner to gain the mark. Make sure that the answer makes sense. Do not give credit for correct words/phrases which are put together in a meaningless manner. Answers must be in the correct context.

Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the Team Leader must be consulted.

#### Using the mark scheme

The mark scheme gives:

- an idea of the types of response expected
- how individual marks are to be awarded
- the total mark for each question
- examples of responses that should NOT receive credit (where applicable).
- 1 / means that the responses are alternatives and either answer should receive full credit.
- 2 ( ) means that a phrase/word is not essential for the award of the mark, but helps the examiner to get the sense of the expected answer.
- 3 [ ] words inside square brackets are instructions or guidance for examiners.
- Phrases/words in **bold** indicate that the <u>meaning</u> of the phrase or the actual word is **essential** to the answer.
- TE (Transferred Error) means that a wrong answer given in an earlier part of a question is used correctly in answer to a later part of the same question.

#### **Quality of Written Communication**

Questions which involve the writing of continuous prose will expect candidates to:

- show clarity of expression
- construct and present coherent arguments
- demonstrate an effective use of grammar, punctuation and spelling.

Full marks can only be awarded if the candidate has demonstrated the above abilities.

Questions where QWC is likely to be particularly important are indicated "QWC" in the mark scheme BUT this does not preclude others.

## Unit 3: Applications of Psychology

## Section A – Criminological Psychology

Guidance	
Marking points are indicative, not comprehensive and other points should be credited. In each case consider OWTTE (or words to that effect).  Each bullet point is a marking point, unless otherwise stated, and each point made by the candidate must be identifiable and comprehensible.	
One mark is to be awarded for each marking point covered. For elaboration of a marking point also award one mark UNLESS otherwise stated.  Refer to levels for A3	

0	Over attain		
Question	Question		
Number			
A1 (a)	Holly set up a laboratory experiment to test eyewitness effectiveness. She asked for volunteers to participate in her study and invited them to watch a video clip of a burglary. After watching the clip, she asked them about what they had seen, and scored how accurately they recalled the burglary.		
	(a) Using your knowledge of the laboratory experiment as a research method, explain <b>one or more</b> ethical issue(s) that Holly should have considered before conducting her study.		
	Answer	Mark	
	One mark per point/elaboration. No credit for stating the	IVIALK	
	guidelines; they should be explained within the context of the study.  Max 1 mark for generic guidelines without any reference to		
	Holly's study/a study of EWT.		
	<ul> <li>Holly would have to gain informed consent before showing the video clips so participants were fully aware of what they would be seeing/eq;</li> <li>She would need to offer all participants a right to withdraw if they felt uncomfortable watching the clips or answering the questions /eq;</li> <li>The participants could find the clip distressing if it is too violent so Holly should be mindful when selecting the clip that it is not too distressing/eq;</li> </ul>		
	<ul> <li>Holly should check with the participants that they are comfortable watching the clip so they are not subject to reliving a personal trauma/eq;</li> </ul>		
	<ul> <li>To avoid embarrassment/stress on interview/protection of participants Holly should make sure participants are aware that it doesn't matter if</li> </ul>		

they have errors in recall /eq;	
Look for other reasonable marking points/guidelines expressed well.	

Question Number	Question	
A1 (b)	Holly set up a laboratory experiment to test eyewitness effectiveness. She asked for volunteers to participate in her study and invited them to watch a video clip of a burglary. After watching the clip, she asked them about what they had seen and scored how accurately they recalled the burglary.  How could Holly have made sure that her study into eyewitness effectiveness was reliable?	
	Answer	Mark
	One mark per point/elaboration. Validity cannot be credited, however, be mindful that some issues can overlap with reliability – go with the intention of the candidate (ignore references to ecological validity).  Max 2 if no reference to Holly/EWT study/lab expt  • Holly should have ensured that the participants watched the same video clip from the same vantage point so there was no variation in procedure/eq; • Holly should standardise the interview so that all participants are asked the same questions in the same way/eq; • Holly should have ensured the scoring of the accuracy of the participants responses was consistent by using a scoring method/coding sheet/eq; • Holly could ensure that her scoring was consistent by asking other researchers to rate the accuracy to gain inter-rater reliability/eq; • Holly should ensure that the conditions of the environment are the same for all participants so that distractions/noises were not present for some participants whilst watching the clip/being interviewed/eq;  Look for other reasonable marking points	(3 AO3)

Question Number	Question	
A1 (c)	Holly set up a laboratory experiment to test eyewitness effectiveness. She asked for volunteers to participate in her study and invited them to watch a video clip of a burglary. After watching the clip, she asked them about what they had seen and scored how accurately they recalled the burglary.  Explain why a field experiment may have been a better research method for Holly to use to test eyewitness effectiveness.	
	Answer	Mark
	<ul> <li>One mark per point/elaboration.</li> <li>Max 2 if no reference to Holly/EWT study</li> <li>A field experiment would have been more realistic an environment for Holly to have conducted her study as real witnesses do not have to recall a video clip under controlled conditions/eq;</li> <li>In the field the witness would experience emotions that cannot be recreated in the laboratory/eq;</li> <li>In the field the event would be spontaneous and unexpected, unlike the contrived lab conditions where participants are expecting to witness an event/eq</li> <li>In the field participants may not be aware of taking part so are more likely to act naturally and not be aware of the study aims/eq;</li> <li>In the field an interview can be recreated realistically so participants will give greater gravity to their answers/eq;</li> </ul>	(3 AO3)
	Look for other reasonable marking points	

Question Number	Question	Question	
A2 (a)	Outline the procedure of <b>one</b> study In Criminological Psychology, <b>other than</b> Loftus and Palmer (1974)		
	Answer	Mark	
	One mark per point/elaboration. Ignore Loftus and Palmer – credit can be given to other Loftus research. Ignore aims, findings and conclusions. Study must be from criminological psychology. Consult TL if in doubt.	(3 AO1)	
	<ul> <li>eg Yuille and Cutshall (1986) focus on research rather than criminal background details.</li> <li>Interviewed real witnesses to a gun shop robbery (4-5) months after the actual incident happened/eq;</li> <li>The study was a case study conducted in the field (field study) as the participants saw a real event/eq;</li> <li>The witnesses who gave their testimony to the police were real and the gun shop robbery was not staged/eq;</li> <li>They compared the original testimony obtained by the police to their interview transcripts/eq;</li> <li>Used leading questions within the interview, such as the yellow car panel / busted headlight/eq;</li> <li>They asked the witnesses to rate their level of stress and vantage point from the crime/eq;</li> </ul>		
	<ul> <li>eg Yarmey (2004)</li> <li>Approached public by opportunity and asked for help to give directions or help find a piece of jewellery/eq;</li> <li>They were then approached by a researcher and asked to recall the person they helped from a set of photographs/eq;</li> <li>They were then approached by a researcher and asked to recall the person they helped either 2 mins or 4 hours later/eq;</li> <li>Participants were asked to identify the person from a photographic line up but some of the targets were not in the lineup/eq;</li> <li>Students were asked to estimate the reliability/accuracy of EWT/eq;</li> </ul>		
	<ul> <li>eg Charlton (2000)</li> <li>Two years before TV was introduced, they collected information about the children and then returned after TV had started to reassess on the same measures /eq;</li> <li>Natural experiment as TV was introduced naturally/ not manipulated/ because researchers used the planned introduction of satellite TV to the island/eq;</li> <li>Questionnaires were given to teachers and parents concerning the children's behaviour to rate children's play/behaviour both before and after TV was</li> </ul>		

<ul> <li>introduced/eq;</li> <li>Content analysis of the television programmes watched by children, particularly violent content, was carried out/eq;</li> <li>Video cameras were set up in the school playground before the data collection from the children began, which were used to record behaviour and measured aggressive/pro-social behaviour/eq;</li> <li>Video cameras were put in place in school classrooms before the data collection from them began so that the children became accustomed to the equipment so that their behaviour was less affected by the cameras/eq;</li> </ul>	
Look for other reasonable marking points	

Question Number	Question	
A2 (b)	Outline one practical application/use in Criminological Psychology of the study you have described in (a).	
	Answer	Mark
	One mark per point/elaboration. TE: No marks if the study is not criminological or not the study described in (a). Maximum marks can be given if (a) is blank and (b) has an identifiable and appropriate study's practical application.	(2 AO2)
	<ul> <li>eg Yuille and Cutshall (1986)</li> <li>It tells us that EWT is reliable enough to use by police and in a court case/eq;</li> <li>Time had no effect on recall, so a witness does not need to recall immediately to the police/eq;</li> <li>The witness testimony will still be reliable in a court case many months later/eq;</li> <li>Stress/anxiety did not have an impact on the accuracy of EWT so even traumatised witnesses can be reliable/eq;</li> </ul>	
	<ul> <li>eg Yarmey (2004)</li> <li>The findings suggest that individuals may overestimate the reliability of EWT so we should inform the jury that their view of the accuracy of witnesses may be inflated/eq;</li> <li>Time did not have an effect so a police officer does not need to question a witness immediately to gain accurate testimony/eq;</li> <li>The witness will not be affected by stress according to the study so even stressed witnesses are reliable and the police can interview them with reasonable reliability/eq;</li> </ul>	

eg Charlton et al (2000)

- The study does not support the role of the watershed directly and censorship may be pointless according to these findings/eq;
- The study supports the role of the family/social network and community to buffer the effects of TV violence/eq;
- High levels of social surveillance can minimise the negative effects of violent television/eq;

Look for other reasonable marking points

Question Number	Question	
A2 (c)	Evaluate the study you have described in (a) in terms of validity <b>and</b> generalisability.	
	Answer	Mark
	One mark per point/elaboration. TE: No credit if the study is not criminological and/or not the study described in a. Max 3 marks for validity and 3 marks for generalisablity All points must be linked to the study in a.	(4 AO2)
	<ul> <li>eg Yuille and Cutshall (1986)</li> <li>The study cannot be repeated as it was based on a naturally occurring gun shop robbery/shooting which cannot be recreated exactly/eq;</li> <li>The witnesses were real and at various vantage points, so the procedure was not standardised/eq;</li> <li>The witnesses were called upon several months later, so may have been subject to media coverage which could have affected their original testimony/eq;</li> <li>The coding units used by the researchers to compare their interviews with police transcripts were highly objective and reliable/eq;</li> <li>The shooting was naturally occurring so has greater ecological validity as witnesses and events were real/spontaneous/emotive/eq;</li> <li>The gun shop robbery/shooting was one-off and unique so may not be generalisable to other incidents/eq;</li> <li>The small sample of 13 limits the generalisability of the findings to all witnesses/eq;</li> <li>As the study was naturally occurring gun shop robbery/shooting, it has generalisability to real life crime/EWT situations/eq;</li> </ul>	
	<ul> <li>eg Yarmey (2004)</li> <li>Yarmey used a field experiment which has control over some but not all variables as it was conducted in a shopping mall/eq;</li> <li>Yarmey used a standardised procedure to approach the witnesses and interview them afterwards, so the procedure is replicable/eq;</li> <li>The study was conducted in a shopping mall so participants behaviour towards the confederate was natural/eq;</li> </ul>	
	<ul> <li>It is unlikely that there would have been demand characteristics because when being asked for directions they were unaware they were part of a study/eq;</li> <li>Participants could have been too busy or other variables may have affected their original observation of the</li> </ul>	

<ul> <li>target, which could have affected their later identification/eq;</li> <li>It was conducted in a shopping mall which is a natural setting so the findings are generalisable to real life/eq;</li> <li>The study was conducted on a large sample of 590, which improves its overall generalisability to witnesses/eq;</li> </ul>	
<ul> <li>eg Charlton et al (2000)</li> <li>The video cameras placed in the playground could be regarded as an invasion of privacy.</li> <li>The introduction of TV was naturally occurring so the design of the study was ecologically valid/eq;</li> <li>The study was a natural experiment on a remote island so cannot be exactly recreated to test for reliable findings/eq;</li> <li>Williams found that children in a similar study did increase their aggression in response to TV so the conclusions are not supported/eq;</li> <li>The researchers could not control other variables, such as supervision and amount and content of television watched, so the procedure was not standardised/eq;</li> <li>The investigation relied upon teacher and parents accounts of behaviour of the children, which may not be reliable/eq;</li> <li>The study was naturally occurring event of TV being introduced to the island, so the results are generalisable to real life situations/eq;</li> <li>The sample were taken from a small remote community island which lacks generalisability/eq;</li> <li>Look for other reasonable marking points</li> </ul>	

Question Number	Question	
А3	William was caught trying to shoplift from a local shop. William had a history of offending which included vandalism and causing a public nuisance.  Using <b>one</b> theory of anti-social behaviour you have studied,	
	explain why William may have become an offender for at least one of these offences, <b>and</b> evaluate this theory.	
	Indicative content	Mark
	Refer to the levels for marking.	(12
	Description (AO1)	AO1/2)
	eg Personality theory	
	<ul> <li>Antisocial behaviour, such as disturbing the public, is caused by an interaction between genetic factors associated with personality and environmental</li> </ul>	

influences

- Personality traits are seen as biological/innate
- Extravert/neurotic/psychotic individuals are more likely to be impulsive/aggressive
- A particular nervous system causes a predisposition to criminality that can be passed on through genetics
- The personality type responds to environmental stimuli differently so may be impulsive and shoplift for a thrill
- An extravert seeks arousal from risk taking/antisocial behaviour to stimulate
- An extravert has a dampened RAS so seek external stimulation in risk taking behaviour to redress the balance
- Neurotic types are more likely to be criminal because of being unstable
- Neurotic individuals are unstable and find it difficult to inhibit their behaviour so may act aggressively
- Neuroticism is linked to ANS, as sympathetic division is quick to turn on and parasympathetic is slow to turn off. Criminality is linked to impulsivity and violent response (fight) which may explain assault
- High neurotic and extravert personalities are more likely to seek out antisocial activity and resist social conditioning
- Psychotic people are more likely to be criminal because they have no conscience so can shoplift or be aggressive without remorse

#### eg Self fulfilling prophecy

- Criminal behaviour can be explained by the internalisation (change in self perception) of a label assigned to an individual, such as William being labelled a shoplifter
- William commits an act perceived/stereotyped as antisocial and is labelled as such
- He is treated differently and in accordance with the label, so William may be viewed with suspicion or fear
- For example people are suspicious of William and give the individual little opportunity to change or disprove the assigned criminal label
- He will show resentment for being treated differently to others by those around him
- William internalises the label of aggressive/shoplifterand fulfils the prophecy set as being a criminal
- Anti-social behaviour is caused by the his response to others expectation

e.g. SLT

- SLT **explains that William's anti**-social behaviour could have occurred through observational learning.
- William would have learned this behaviour through the process of attention, retention, reproduction, reinforcement and motivation.
- William may have observed antisocial behaviour elicited from friends and people in his neighbourhood and paid attention to this.
- He is old enough to be able to replicate this antisocial behaviour and had the opportunity to vandalise and shoplift with relative ease.
- He may have seen people be rewarded for vandalism with status in a gang or shop lift rewarding items and therefore be motivated to copy this action via vicarious reinforcement.
- William may observe role models in his community or family so be motivated to copy them in order to be like them.
- He may well identify with a local criminal.
- He may gain satisfaction from shoplifting goods or status from vandalism that is self motivating.

#### **Evaluation (AO2)**

Personality theory (Eysenck)

- Hare (2001) found an over representation of psychotic individuals have a tendency to be violent
- Gran found that individuals scored higher on the PCL-R if they had anti-social behaviour priors
- Gran also found that 48% of ex-offenders rated as psychotic were likely to reoffend compared to those rated as not highly psychotic
- Center and Kemp found that there was a relationship between anti-social behaviour and psychoticism in a sample of 11 delinquents
- Raine and Venables found no relationship between conditioning (as measured by skin conductivity) and socialisation (teacher rated) not supporting Eysenck

#### eg Self-fulfilling prophecy

- Acceptance of a label can be affected by the self esteem of the individual, if low they are more likely to accept the label ascribed
- Rebellion against a label is very possible
- Jahoda found that children born on a Wednesday and given a name meaning that they are considered to be aggressive are more likely to have a criminal record later in life than those born on Monday/considered mild and meek
- Rosenthal and Jacobsen found that children randomly labelled bloomers were recorded to have a higher IQ than those labelled non-bloomers due to

- perceived teacher expectation/attention
- Madon found that children predicted to be alcohol users by their parents were more likely to use alcohol, fulfilling the prophecy of their parents
- We cannot experimentally test the effect of SFP because of ethical reasons so conclusions are unclear
- There are other reasons for anti-social behaviour, such as the way we are raised by parents/genetic reasons/social learning of antisocial behaviour/cortical under arousal, that may account for anti-social behaviour other than SFP
- Evidence for SFP may not be criminological (eg Rosenthal and Jacobsen) but they can be assumed to happen for a variety of behaviours

#### SLT

- Bandura showed that children learn aggression from role models and this process can be used to explain how William could acquire antisocial behaviour, so this study is good evidence for this taking place.
- Williams showed that children copied aggression from the media when it was intorduced to Notel in a community, again providing support for the fact that William could have copied from others.
- Charlton did not find evidence for copying aggression from the media, which does not support SLT as an explanation of William's behaivour.
- It would be very difficult to ascertain whether modelling was occurring for William as there can be a delay between attention and reporduction making it difficult to prove whether he was actually copying others.
- William would have to be able to observe antisocial behaviour in order to copy it, so SLT could not explain antisocial acts in the absence of observation.
- An alternative theory such as SFP could also explain his behaviour as he could have been labelled a criminal and treated differently by those around him, leading to him carrying out vandalism.

Look for other material

Level	Mark	Descriptor
		AO1: Knowledge and understanding of psychology
		and how psychology works.
		AO2: Application/evaluation of knowledge and
		understanding of psychology and how psychology

		works.
	0	No rewardable material
Level 1	1-3	Candidates will produce <b>brief</b> answers, making simple statements showing some relevance to the question.  • Brief and basic account of one theory, may not be clear and shows significant under development.  • Little or no attempt at the evaluative demands of the question.  Lack of relevant evidence. The skills needed to produce effective writing will not normally be present. The writing may have some coherence and will be generally comprehensible, but lack both clarity and organisation. High incidence of
Level 2	4-6	<ul> <li>syntactical and /or spelling errors.</li> <li>Description OR evaluation only OR limited attempt at each OR one is in less detail than the other         <ul> <li>Limited description of one identifiable theory that may be linked to William's behaviour/a criminal act that William has done</li> <li>Limited evaluation of the theory described, using simple or limited statements.</li> </ul> </li> <li>Candidates will produce statements with some</li> </ul>
		development in the form of <b>mostly accurate</b> and relevant factual material. There are likely to be passages which lack clarity and proper organisation. Frequent syntactical and /or spelling errors are likely to be present. Limited clarity organisation in the response.
Level 3	7-9	<ul> <li>Good and accurate description</li> <li>Good description of one theory that is used to explain one of William's offending behaviours. Showing development and good breadth or depth of detail.</li> <li>Good evaluation using a range of ideas or a few ideas developed well.</li> </ul>
		The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation. Some syntactical and /or spelling errors are likely to be present.
Level 4	10-	<ul> <li>Candidate has attempted and answered both injunctions in the question very well.</li> <li>Very good description of the theory showing breadth and depth of detail.</li> <li>The answer description is well explained in terms of one of William's offending</li> </ul>

behaviours

 Very good evaluation showing good understanding of the strengths and/or weaknesses of the theory using well developed evaluation.

The skills needed to produce convincing extended writing are in place. Very few syntactical and /or spelling errors may be found. Very good organisation and planning.

Given time constraints and limited number of marks, full marks must be given when the answer is reasonably detailed even if not all the indicative content is present.

### Section B - Child Psychology

Marking points are indicative, not comprehensive and other	·
points should be credited. In each case consider OWTTE (or words to that effect).  Each bullet point is a marking point, unless otherwise stated, and each point made by the candidate must be identifiable and comprehensible.	
One mark is to be awarded for each marking point covered. For elaboration of a marking point also award one mark UNLESS otherwise stated.  Refer to levels for B3	
	words to that effect).  Each bullet point is a marking point, unless otherwise stated, and each point made by the candidate must be identifiable and comprehensible.  One mark is to be awarded for each marking point covered. For elaboration of a marking point also award one mark

Question Number	Question	
B1 (a)	Mario is 12 months old and taking part in the 'strange situation' procedure. Mario becomes distressed when separated from his caregiver, and is not easily soothed when they are reunited.	
	(a) State the attachment type which best defines Mario's behaviour according to the 'strange situation'.	
	Answer	Mark
	Type C/Insecure-Resistant/ambivalent/ anxious-resistant/resistant/anxious-ambivalent/ insecure-ambivalent/C	(1 AO1)
	Do not accept insecure or anxious alone	

Question Number	Question	
B1 (b)	Explain what the findings of cross-cultural research using the 'strange situation' procedure tells us about the nature of attachment.	
	Answer	Mark
	One mark per point/elaboration. Research does not need to be named to gain credit.  Max 1 for a list of relevant findings with no link to the nature of attachment	(3 AO2)
	<ul> <li>The type of attachment found using the strange situation is affected by cultural differences in parenting style/eq;</li> <li>Miyake findings can be explained by a culture of close parent-child proximity and desirability of noncrying children which affects attachment type/eq;</li> <li>Japanese children are kept close to their mothers much of the time, which would explain why it is an inappropriate test to use in this culture/eq;</li> <li>Grossman and Grossman's study findings can be explained by a cultural ideology of independent children which affects attachment type/eq;</li> <li>German parents encourage independence so infants don't cry when separated showing avoidant type behaviour/eq;</li> <li>Sagi's findings can be explained by the lack of close proximity between parents and children and the employment of the metapelet/eq;</li> <li>Further studies of modern Israeli kibbutz where parents cohabit with their children show more secure attachment/eq;</li> <li>Look for other reasonable marking points</li> </ul>	

Question Number	Question	
B1 (c)	Evaluate the 'strange situation' procedure in terms of reliability and at least one ethical issue.	
	Answer	Mark
	reliability and at least one ethical issue.	Mark (4 AO2)
	<ul> <li>The findings as typically recorded so that different raters can determine attachment type and interrater reliability can be established/eq;</li> <li>2 mark response:</li> <li>The strange situation procedure may be distressing for children as they are temporally separated from their caregiver, particualrly for Japanese children who are not accustomed to separation/eq;</li> </ul>	
	Look for other reasonable marking points	

Question Number	Question	
B2 (a)	Many different research methods can be used to study child development. Researchers select a research method appropriate to the situation.  Explain why the case study research method was the most appropriate research method to use in the case of Genie (Curtiss, 1977).	
	Answer	Mark
	One mark per point/elaboration. Max 2 marks for generic points only	(4 AO3)
	<ul> <li>A case study was most appropriate because Genie was a one off/ unique case that could not be replicated/eq;</li> <li>With rare cases such as this a case study uses many techniques, such as observations, tests, to gather detailed data/eq;</li> <li>Case studies can be conducted longitudinally, so Genie's progress could be mapped/eq;</li> <li>A case study was necessary to understand the nature of her privation and subsequent development in response to therapies, this could not be achieved by a single other method/eq;</li> <li>Ethically it was better to use a case study because of the implication of being closely involved in her care/eq;</li> <li>Triangulation, typically employed in a case study could be used to cross check the validity of test findings and observations/eq;</li> <li>Case studies have ecological validity as they are not manipulating an event, which is appropriate as this could not be possible in cases of privation/experimental research is not possible/ethical/eq;</li> <li>Look for other marking points</li> </ul>	

Question Number	Question	
B2 (b)	Describe <b>one</b> research method, <b>other than</b> the case study, that could be used to investigate child development.	
	Answer	Mark
	One mark per point/elaboration. Accept any method that could be appropriate to use with children (observation, experiment, longitudinal, cross sectional, survey), do not accept inappropriate methods (animal research, scanning techniques, twin studies). No credit for case-study description  Max 2 if no reference to child development/child psychology/ children	(4 AO3)
	<ul> <li>Observational</li> <li>Observational research could be used to study child development as certain milestones in progress can be observed/eq;</li> <li>A child could be observed in a naturalistic situation, such as the family home, to record naturally occuring behaviour/eq;</li> <li>Covert would involve the child being unaware of being observed and overt is where they are aware/eq;</li> <li>Participant is where the observer is involved in the task given to the child and non-participant is where they would rate the behaviour away from the situation/behind a mirror/eq;</li> <li>A coding sheet would be drawn up for certain behaviours and tallies could be used when each event is observed/eq;</li> <li>A child's response could be observed when presented with a task/object to judge their cognitive progress/eq;</li> <li>Longitudinal</li> <li>Longitudinal research looks at how a child develops over the course of a period of time/eq;</li> <li>The child is revisited throughout the duration of the study so that progress can be monitored/recorded/eq;</li> <li>Often detailed information/notes/recordings are taken of the child at these time periods/eq;</li> <li>Child of our Time is an example of a longitudinal study where researchers have investigated social, cognitive and emotional development of children born around the Milennium/eq;</li> </ul>	
	<ul> <li>A coding sheet would be drawn up for certain behaviours and tallies could be used when each event is observed/eq;</li> <li>A child's response could be observed when presented with a task/object to judge their cognitive progress/eq;</li> <li>Longitudinal</li> <li>Longitudinal research looks at how a child develops over the course of a period of time/eq;</li> <li>The child is revisited throughout the duration of the study so that progress can be monitored/recorded/eq;</li> <li>Often detailed information/notes/recordings are taken of the child at these time periods/eq;</li> <li>Child of our Time is an example of a longitudinal study where researchers have investigated social, cognitive and emotional development of children</li> </ul>	

Question	Question	
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Number		
B2 (c)	Outline two features of a developmental disorder which	
	might affect a child's development.	
	Answer	Mark
	One mark for each way that a developmental disorder	
	might affect a child's development.	(2 AO1)
	e.g. Autism:	
	<ul> <li>Delayed speech development/eq;</li> </ul>	
	<ul> <li>Delayed language development/eq;</li> </ul>	
	<ul> <li>Inability to understand others</li> </ul>	
	emotions/cognition/eq;	
	<ul> <li>Lack of eye contact/eq;</li> </ul>	
	<ul> <li>Severe problems in forming relationships/eq;</li> </ul>	
	Problems engaging in social	
	situations/interaction/eq;	
	<ul> <li>Unresponsiveness/inappropriate response to</li> </ul>	
	environmental stimuli/eq;	
	<ul> <li>Intellectual variation ranging from mental</li> </ul>	
	retardation to acute abilities in particular skills/eq;	
	Repetitive behaviour/ritualistic behaviour/eq;	
	e.g. ADHD	
	Difficulty maintain attention resulting in	
	fidgeting/eq;	
	<ul> <li>Talking excessively/eq;</li> </ul>	
	being overactive.	
	<ul> <li>Impulsive behaviour that interrupts or interferes</li> </ul>	
	with others.	
	<ul> <li>Reckless actions that may cause harm to themselves</li> </ul>	
	or others.	
	<ul> <li>Distractibility from a task or listening to others.</li> </ul>	
	<ul> <li>Difficulty following instructions for a sustained</li> </ul>	
	period of time.	
	<ul> <li>Lack of organisational skills and time management.</li> </ul>	
	e.g. Severe learning difficulties	
	<ul> <li>Mental retardation/IQ classified as below 50.</li> </ul>	
	<ul> <li>Physical disabilities that hinder mobility and motor</li> </ul>	
	control.	
	<ul> <li>Limited communication skills.</li> </ul>	
	<ul> <li>Incapacity to look after themselves physically.</li> </ul>	
	<ul> <li>Emotional under development/difficulties.</li> </ul>	
	Look for other reasonable marking points	

Question	Question		
Number			
В3	Describe and evaluate research into the effects of		
	deprivation/separation of a child from their primary caregiver.		
	In your evaluation, you must include how the negative effects		

of deprivation/separation <b>may</b> be reduced.	
Indicative content	Mark
Refer to levels below for marking.  Research can be theory/explanation (Bowlby deprivation hypothesis) or research studies into deprivation (44 juvenile thieves) or daycare (Sylva, Belsky, Andersson) or other (hospitalisation) or combination.	(12 AO1/2)
Indicative content Explanation:	
<ul> <li>Research: e.g. Bowlby (1944/1946) Description <ul> <li>He used a sample of 88 children attending a clinic for behavioural problems</li> <li>44 were identified as thieves and 44 had emotional issues</li> <li>The children were interviewed and a case history was built up of all the children</li> <li>An independent social worker was used to conduct the interviews and assessments as well.</li> <li>Backgrounds of the children were checked by interviews with parents.</li> <li>Bowlby found that children separated/deprived of a caregiver for an extended period in the first few years of life were at greater chance of suffering from maternal deprivation</li> </ul> </li> </ul>	
<ul> <li>Belsky and Rovine (1988)</li> <li>Description</li> <li>Used the findings of two American longitudinal studies to assess effects of daycare</li> <li>Children had experienced daycare within the first year of life and attachments to the mother and father were examined</li> <li>The strange situation procedure was used to classify attachment types</li> </ul>	
<ul> <li>Description Bowlby's MDH</li> <li>Bowlby thought that if a child suffered deprivation in the first two years of life, some of these children may suffer negative effects.</li> <li>Bond disruption can result in a negative internal working model.</li> <li>A negative internal working model can result in poor/insecure relationships later in life.</li> <li>Affectionless psychopathy, lack of remorse, can result from maternal deprivation.</li> </ul>	

#### Evaluation of Belsky and Rovine

- The strange situation may not be an appropriate tool for measuring attachment in daycare children who are used to separation
- Children may not be avoidant, but used to stranger care
- Daycare can also have positive effects upon children's intellectual and social development
- Factors other than daycare may account for the findings, such as resilience of the child
- The procedure was highly controlled/standardised and reliability was established
- DiLalla (1998) found that children who spent no time in daycare were more prosocial than children who attended daycare
- The EPPE project suggests that children who attend daycare can have positive benefits – which goes against Belsky's findings

#### Evaluation of Bowlby

- The study was non-experimental so no causal relationship between maternal deprivation and emotional adjustment can be concluded
- Bowlby conducted the interviews himself so can be criticised for researcher bias
- Other reasons could be responsible for the affectionless psychopathy in the families where deprivation occurred
- The reason for the maternal deprivation may have been the cause of emotional problems rather than the separation itself
- The study used retrospective data which may be unreliable
- Bowlby's findings led to better hospital policies with regards to parents being able to frequently stay with their child.
- Bowlby's finding led to a key worker attachment figure in daycare establishments.

#### Evaluation of MDH

- Bowlby used Harlows rhesus monky experiments as supporting evidence for the detrimental effects of deprivation.
- Many have criticised Bowlby for describing the outcomes of privation rather than deprivation.
- Inadvertently Bowlbys theory was used to force women back into domesticity following the return of soldiers after the war.
- Bowlby's theory has been influential in changing hospital/daycare/institutional policy to ensure substitute attachments/minimal deprivation is experienced by children.

#### Hospitalisation

- Hospitalisation can involve children spending time away from their parents/primary caregiver for much of the time
- The child may suffer the effects of short term deprivation such as protest, despair, detachment
- The child may become initially very distressed and reject the substitute care of others, such as nursing staff (protest)
- The child may, after time, become depressed and quiet/apathetic towards others (detachment)
- The return of the caregiver may be ignored and their affection shunned by the child (detachment)

# How the negative effects of separation/deprivation can be reduced:

- Higher staff numbers for good ratios with children help form better substitute care
- Rotation of staff should be minimised to avoid separation from children regularly so that children can form a bond/attachment with someone if there is consistency
- Reduce time spent in daycare/separated from caregiver so that attachment/bond with main caregiver is less disrupted
- Less time spent in daycare allows child and caregiver to maintain their relationship
- Start daycare later for the child's age as this allows for early attachments to be formed before separation occurs
- Use qualified staff who are trained to provide substitute care and provide stimulating environments for children
- Make links between home and school so parents should be encouraged to bring items from home that can help the child cope, e.g. a favourite toy can provide emotional support
- Ensure that features of good quality daycare are provided, e.g. high staff: child ratio/ low staff turnover, qualified staff, etc
- Avoid separation before the first two years of life so that strong bonds can be formed and a safe base established for a template for future relationships.

Look for other material

Level	Mark	Descriptor
		AO1: Knowledge and understanding of psychology and how psychology works. AO2: Application/evaluation of knowledge and understanding of psychology and how psychology works.
	0	No rewardable material
Level 1	1-3	Candidates will produce <b>brief</b> answers, making simple statements showing some relevance to the question.  • Brief and basic description of research into deprivation/separation  • Little or no attempt at the evaluative demands of the question.
		Lack of relevant evidence. The skills needed to produce effective writing will not normally be present. The writing may have some coherence and will be generally comprehensible, but lack both clarity and organisation. High incidence of syntactical and /or spelling errors.
Level 2	4-6	Description OR evaluation only OR limited attempt at each OR one is in less detail than the other  • Limited description of research into deprivation/separation research into deprivation/separation Answer lacks breadth in terms of the area of research.  • Limited evaluation of research into deprivation/separation There may be no reference to how the effects can be minimised
		Candidates will produce statements with some development in the form of <b>mostly accurate</b> and relevant factual material. There are likely to be passages which lack clarity and proper organisation. Frequent syntactical and /or spelling errors are likely to be present. Limited clarity organisation in the response.
Level 3	7-9	<ul> <li>Good and accurate description</li> <li>Good description of research into deprivation/separation – studies/theory have some depth of detail or breadth in terms of quantity.</li> <li>Good evaluation into research into deprivation/separation – more than one point expressed well or breadth of points.</li> <li>There is some attempt to explain how to reduce the effects</li> </ul>

		The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation. Some syntactical and /or spelling errors are likely to be present.
Level 4	10- 12	Candidate has attempted and answered <b>both</b> injunctions in the question very well.  • Very good breadth and depth of detail covering a range of research (theory/studies) into deprivation/separation with breadth and/or depth with very good detail  • Very good evaluation of research into deprivation/separation, a range of comments expressed well.  • There is a good explanation of how the effects can be reduced.
		The skills needed to produce convincing extended writing are in place. Very few syntactical and /or spelling errors may be found. Very good organisation and planning.  Given time constraints and limited number of marks, full marks must be given when the answer is reasonably detailed even if not all the indicative content is present.

## Section C - Health Psychology

Guidance	
Marking points are indicative, not comprehensive and other points should be credited. In each case consider OWTTE (or words to that effect).  Each bullet point is a marking point, unless otherwise stated, and each point made by the candidate must be identifiable and comprehensible.	
One mark is to be awarded for each marking point covered. For elaboration of a marking point also award one mark UNLESS otherwise stated.  Refer to levels for C3	

Question Number	Question	
C1 (a)	Recreational drugs have an effect on the neural and/or	

hormonal systems of the body.	
Outline the mode of action of <b>one</b> recreational drug you have studied.	
Answer	Mark
One mark per point/elaboration  Max 1 for effects of drug (e.g. euphoria)	(3 AO1)
<ul> <li>Heroin increases the level of dopamine in the brain/eq;</li> <li>Acts upon the opioid receptors sites/eq;</li> <li>Morphine produced by taking heroin is a depressant and painkiller/eq;</li> <li>Mimics endorphins/eq;</li> <li>GABA activity is inhibited/eq;</li> <li>The drug increases the feeling of wellbeing/euphoria/eq;</li> </ul>	
<ul> <li>Alcohol is a depressant/eq;</li> <li>It increases GABA in the brain which inhibits neural transmission/eq;</li> <li>Alcohol binds to the GABA receptor site to increase GABA's inhibitory effect/eq;</li> <li>Inhibits glutamate receptor function/eq;</li> </ul>	
<ul> <li>Nicotine is a stimulant/eq;</li> <li>Nicotine stimulates ACh/acetylcholine release/eq;</li> <li>Nicotine encourages mainly chemical actions of e.g. serotonin, noradrenaline/eq;</li> <li>Nicotine extends the effect of dopamine in reward centres of the brain/eq;</li> </ul>	
Look for other reasonable material	

Question Number	Question	
C1 (b)	Prolonged use of recreational substances can lead to substance misuse and dependency.	
	Evaluate <b>one</b> biological treatment as it is used to treat drug dependency. Include at least one strength <b>and</b> one weakness in your answer.	
	Answer	Mark
	One mark per point/elaboration. Max 3 marks for strength(s) and weakness(es).	(4 AO2)
	<ul> <li>Evaluation of drug therapy</li> <li>Drug addicts can break away from the criminal aspects of drug abuse as they no longer require the finances to obtain illegal drugs so therapy in this sense is a good thing/eq;</li> <li>Quality of life is improved as abuse, prostitution, theft etc are reduced and risks lowered so drug therapy can be positive in social aspects too/eq;</li> <li>Reduced risk of needle sharing issues as administered orally so positive from a health level/eq;</li> <li>Controlled drug use has less risk of overdose as prescribed carefully/eq;</li> <li>If drugs are taken in a cocktail, with other substances, overdose can be a risk/eq;</li> <li>Substitute drugs may end up on the black market/eq;</li> <li>There is always the risk of addiction/side effects associated with the substitute drug/eq;</li> <li>Blattler et al found that drug therapy was successful in reducing addiction and associated social and health issues/eq;</li> <li>Methadone as a treatment for heroin addiction is difficult to overdose on as it is supplied in controlled measures/eq;</li> <li>Often it is used alongside counselling to help with social support/eq;</li> <li>Drug replacement therapy can be very costly to the NHS and government when it is seen as simply replacing one drug with another/eq;</li> <li>Marsch's (1998) meta-analysis of methadone maintenance programmes support the efficacy of drug therapy in reducing heroin use, HIC and criminality/eq;</li> <li>Amato et al (2005) found high doses of methadone to be more effective as a treatment for heroin addiction than low doses, methadone detoxification treatment, no treatment and alternative therapies/eq;</li> <li>Vanichseni et al (2001) found patients in Bangkok methadone maintenance programmes were more likely to complete a 45 day treatment programme than when undergoing detoxification programmes/eq;</li> <li>Look for other reasonable marking points.</li> </ul>	

Question Number	Question	
C1 (c)	You will have studied one other way of treating substance misuse which is different to the one you have used in (b). Explain why this different treatment may be more appropriate to treat substance misuse than the one you have used in (b).	
	Answer	Mark
	Refer to levels TE: No credit for description of therapy that has already been identified in b. Appropriateness can refer to practical issues, ethical issues or issues of effectiveness.	(2 AO2)
	1 mark A basic outline of how an alternative therapy may be more appropriate.	
	2 marks A good explanation of how a therapy is more appropriate than the one described in (b) or more than one issue offered	
	<ul> <li>Tep do not have withdrawal or addiction effects associated with the use of drug therapies</li> <li>Teps are associated with increase attention, due to the need to reinforce appropriate behaviour, which involves engagement and social aspects when an addict is recovering that they would not get with drug treatments.</li> <li>Drug treatments can involve taking alternative drugs, this can be seen as immoral, and is not a problem associated with Teps.</li> </ul>	
	<ul> <li>Aversion therapy</li> <li>Aversion therapy does not involve problems of addiction or withdrawal</li> <li>Participants must be fully informed of the process before undertaking the treatment but at least have some control over when to engage in the treatment process</li> </ul>	
	<ul> <li>Alcoholics anonymous</li> <li>Is useful in helping the family as well as the individual compared to drug therapy</li> <li>It is not an invasive therapy, no side effects and so on, unlike drug therapy</li> <li>Teaches coping strategies including recognition that relapse is a real danger so can be a long term solution compared to drugs</li> <li>Offers a social network to support recovering addicts</li> </ul>	

<ul> <li>that drug treatment does not offer</li> <li>Offers a long term strategy without the side effects of some drugs</li> </ul>	
<ul> <li>Contingency programmes/token economy</li> <li>Higgins achieved an 11.7 week abstinence from cocaine when using a voucher system</li> <li>Petry found success using a prize contingency programme for cocaine addicts</li> <li>Cheaper than drug replacement therapy</li> </ul>	
<ul> <li>hypnotherapy</li> <li>No side effects as one would find with drug therapy</li> <li>It deals with the psychological addiction rather than just the physical addiction by suggesting techniques to deal with cravings</li> </ul>	
Look for other reasonable marking points	

_		
Question	Question	
Number		
C2 (a)	Natalia is investigating the effects of drugs, and is using animals in her laboratory research.	
	Explain <b>one or more</b> ethical issue that Natalia would have to consider when conducting her research.	
	Answer	Mark
	One mark per point/elaboration.	
	Credit only ethics – ignore human ethics.  Max 2 marks if unrelated to drug research/Natalia	(3 AO3)
	<ul> <li>She would need to consider that it is preferable to use animals in drug research than humans because of potential harm/eq;</li> <li>She could use Bateson's cube to consider whether the costs to the animals would outweigh the benefits to drug research/eq;</li> <li>Natalia would need to use the least number of animals required in her procedure which would satisfy one of the conditions for a Home Office licence (can relate to any of personal, project, premises licences)/eq;</li> <li>Some would argue that any animal research into drugs is unjustifiable if it causes harm/eq;</li> <li>Natalia would have to consider issues of caging to ensure appropriate accomodation was used for the species being caged/eq;</li> <li>Natalia would need to consider the type of species she used to ensure feeding and sociability issues were considered for the species/eq;</li> <li>Natalia would need to consider the species to ensure</li> </ul>	

Look for other reasonable marking points.	
that no endangered species were used in her trials/eq	

Question Number	Question	
C2 (b)	The Learning Approach can be used to explain substance misuse.  Evaluate the Learning Approach as it is used to explain substance misuse.  Answer	Mark
	<ul> <li>One mark per point/elaboration.</li> <li>Ignore description.</li> <li>Bandura found that children imitated aggressive behaviour from adult role models which could happen with drugs where they observe and imitate drug taking behaviour/eq;</li> <li>Ennett et al. (1994) found that friendship groups discouraged smoking rather than encouraged it which goes against learning theory/eq;</li> <li>Cook and Mineka (1989) found that monkeys acquired a fear of toy snakes but not flowers through observational learning which could mean drug taking is also acquired through copying models/eq;</li> <li>Newton et al (2009) asked methamphetamine users why they took the drug and found that the most common reason give was "pleasure seeking" (56%), followed by impulsivity and habits (26%), with 30% of ppts. saying that pain avoidance was not a reason for taking drugs/eq;</li> <li>Studies testing learning theory involving animals lack generalisability to humans due to differences in brain structure/eq;</li> <li>Bozarth and Wise (1985) found that rats will self administer occaine in order to reinforce themselves to the point that they will die from it/eq;</li> <li>Operant conditioning is supported by Pickens and Thompson who found that cocaine reinforced delivery of cocaine in rats/eq;</li> <li>The learning explanation is the nurture side whereas the biological explanation is the nature side of the debate/eq;</li> <li>Some drugs produce unpleasant side effects/cigarettes have a nasty taste and yet still cause addiction, which cannot be explained by learning theory/eq;</li> <li>The learning approach accounts for why different cultures use different drugs due to different role models which the biological approach cannot account for/eq;</li> <li>The learning explanation of addiction is closely related to the biological approach as it builds upon the need for pleasure, avoidance of withdrawal effects and reinforcement/eq;</li> </ul>	(6 AO2)
	Look for other reasonable marking points.	

Question Number	Question	
<b>C3</b>	Describe one study you have learned about that has <b>investigated</b> drug <b>s using human participants</b> . Evaluate the use of human participants to research the effects of drugs in terms of methodological issues.  Do not use ethical issues in your evaluation.	
		Mark
	Indicative content  Mark according to the levels below.  Blattler et al. (2002)  • The aim was to see whether a maintenance treatment (doses of heroin combined with therapy) would lead to reduced heroin and cocaine use  • The study was a naturalistic study in Switzerland  • Sample consisted of 266 patients (98 female, 168 male) who used heroin and also used cocaine (called 'polydrug use')  • Participants were selected from an existing treatment programme called PROVE and had been addicted for over 2 years  • The treatment programme was given approval from an ethical committee (Swiss Academy of Medical Sciences)  • Patients were given daily doses of heroin and they had to attend psychosocial therapy (such as counselling and receive health care)  • If they sold the drugs etc. they were excluded from the treatment programme  • Patients were interviewed about their drug use at the beginning and then every 6 months during the 18-month study to see if they had reduced drug use  • The interviews were carried out by independent interviewers  • A standardised questionnaire was used in the interviews, which asked the same questions to each drug user  • Participants were given a drug test (urine sample) at the start and randomly throughout the study  • Throughout the treatment programme a safety assurance group was used to monitor the participants  • Before treatment 90% injected cocaine and 75% regularly injected heroin and cocaine  • Before treatment more than half used cannabis and 33% used alcohol  • After treatment cocaine use decreased from 84% to 48%  • For daily users, there was a fall from 30% to 6%  • The number of non-users went up from 16% to 52%  • Heroin use for all groups decreased	(12 AO1/3)

 It was concluded that heroin maintenance in a highmonitoring situation helps to reduce both cocaine and heroin use

## Ennett et al 1994

- 1092 Students in the 9th grade in 5 schools within a south east county of the USA in 1980.
- Adolescents were interviewed twice in their own homes about their smoking behaviour at the beginning of 9th grade (14yrs) and at the beginning of 10th grade (15yrs)
- They also provided the names of their 3 best friends.
- Cigarette smoking was defined based on adolescent's answers and the presence of carbon monoxide in the breath samples. 15% were identified as current smokers.
- Cliques comprised of three or more adolescents who link to most of the other members of their group. (42.2%) A link from person A to B was assumed to be reciprocated.
- Those not in cliques were called isolates. (28.6%) Liaisons were those who were friends with other adolescents but not in any cliques. (29.2%)
- Slightly under half of the participants were regarded as cliques by the researchers, the remainder being clique liaisons or isolated individuals
- 89.9% of the clique members were non-smokers
- 2% of cliques were entirely smokers
- 68% of cliques were entirely non-smokers
- Cliques that were similar (race/sex/mothers educational level) were either all smokers or non-smokers, and dissimilar cliques included both smokers and non-smokers
- Peer groups tend to discourage smoking, and only the small number of similar smoking groups encourage smoking
- Girls are more likely to be in smoking cliques than boys
- The mothers educational level affected adolescent smoking

# Brook et al 1999

- This longitudinal study is an examination of the relationship between marijuana use and the assumption of adult roles, as well as the relationship between assuming adult roles and the likelihood of later marijuana use.
- Data were collected at 5 points in time from childhood through early adulthood (late 20s) by means of a structured questionnaire.
- Participants' marijuana use and the assumption of adult roles, including employment, marriage, parenthood, and living arrangements, were measured, and the data were analysed with logistic regression analyses.
- The sample was based on a randomly selected group of 976 families living within two counties in upstate New York
- At Time 1 (T1) mothers were interviewed about their

- background, family structure, health history, and childrearing methods; they were also asked about the child's personality, behaviour, and development.
- At T2 to T4, both the mother and child were interviewed separately by lay interviewers.
- At T5, only the young adult was interviewed. The mother and child interviews lasted about 2 hr each.
- A history of marijuana use was associated with an increased risk of adopting more unconventional adult roles, such as postponement of marriage, having a child out of wedlock, and unemployment.
- These results suggest that frequent prior marijuana use may adversely affect one's ability to successfully assume conventional adult roles.
- Furthermore, controlling for earlier marijuana use, marriage during early adulthood significantly decreased the risk of later marijuana use.
- Adolescent marijuana users were 1.8 times more likely to be unemployed in their 20s
- Heavy marijuana users were twice as likely to be living in a non-traditional family setting (co-habiting, living with friends or alone)

# Wareing et al 2000

- 30 individuals took part in the study (10 non-users, 10 current users and 10 previous users).
- Participants were recruited using the 'snowball' technique
- Participants were tested on word span, Brook's spatial matrix task, a visual memory task and for verbal fluency
- Central executive functioning was assessed through a random-letter generation task and participants were asked to speak aloud consonants (i.e. no vowels) in a random sequence.
- To assess information processing speed participants were presented with a booklet containing stimuli, each one consisting of two rows of letters. They were given 30 s to classify as many rows as possible as' the same' or 'different' (by writing the letter 'S' or 'D' next to each pair).
- A number of other measures were also taken including period of MDMA use, frequency of use, the number of tablets ingested in a single event, number of days since an ecstasy tablet had last been ingested, etc.
- Compared to the control group, users of MDMA had some impaired executive functioning
- Users of MDMA were more anxious than the control group
- Prior users of MDMA scored higher on arousal than current users
- MDMA users processed information as quickly but less accurately than non-users
- MDMA users showed a higher rate of vowel intrusions in

the random letter generating task than non-users
MDMA users generated few letters and a higher degree of redundancy (repetitions)

#### Evaluation

- In depth research into factors associated with drug use can be investigated so that vulnerability can be predicted in humans
- Human studies do not have generalisability issues associated with animal research - animals may not respond in the same way to drugs
- They test drugs on humans that other humans will use so the findings will show exactly what effects the drugs will have on humans because we share the same central nervous system
- Human research conducted in real life is more valid than artificial situations used to study animals
- Which means findings can be applied to real life situations such as to help drug users
- May lack ecological validity as unnatural tests are performed in a lab environment, So the experimental tests may not represent real life behaviour
- Participants may alter their behaviour as a result of taking part in the experiment so the results may not represent real life responses to drug use and ignore social conditions in which people often take drugs
- Participants may not tell the truth about their drug use so distort the results this is because drug taking is a sensitive topic so participants may cover up/exaggerate the extent of their drug misuse
- Participants may give a socially desirable answer and say what they believe they should say which would affect the validity of the findings as all responses will be skewed to social norms/values

Look for other material

Level	Mark	Descriptor
		AO1: Knowledge and understanding of psychology and how psychology works. AO2: Application/evaluation of knowledge and understanding of psychology and how psychology works.
	0	No rewardable material
Level 1	1-3	Candidates will produce brief answers, making simple statements showing some relevance to the question.  • Brief and basic description of one study using human participants
		<ul> <li>Little or no attempt at the evaluative</li> </ul>

		demands of the question.
Level 2	4-6	Lack of relevant evidence. The skills needed to produce effective writing will not normally be present. The writing may have some coherence and will be generally comprehensible, but lack both clarity and organisation. High incidence of syntactical and /or spelling errors.  Description OR evaluation only OR limited attempt at each OR one is in less detail than the other  • Limited description of one study using human participants  • Limited evaluation of the use of humans in research or exclusively evaluating the study described without significant reference to the use of humans in research.
		Candidates will produce statements with some development in the form of <b>mostly accurate</b> and relevant factual material. There are likely to be passages which lack clarity and proper organisation. Frequent syntactical and /or spelling errors are likely to be present. Limited clarity organisation in the response.
Level 3	7-9	Candidate has attempted and answered <b>both</b> injunctions in the question well.  • Good description of one study using human participants  • Evaluation of human participants as research participants in drug research, has depth or breadth. May include evaluation of the described study, but this is not pervasive.
		The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation. Some syntactical and /or spelling errors are likely to be present.
Level 4	10-12	<ul> <li>Candidate has attempted and answered both injunctions in the question very well.</li> <li>Very good description of one study using human participants – the description has detail about the nature of the procedure and findings.</li> <li>Evaluation covering a range of evaluative comments regarding the use of humans in drug research. Has depth and breadth. Will be focused on the demands of the question in terms of methodology.</li> <li>The skills needed to produce convincing extended</li> </ul>

writing are in place. Very few syntactical and /or spelling errors may be found. Very good organisation and planning. Given time constraints and limited number of marks, full marks must be given when the answer is reasonably detailed even if not all the indicative content is present.

# Section D - Sport Psychology

Guidance	
Marking points are indicative, not comprehensive and other points should be credited. In each case consider OWTTE (or words to that effect).  Each bullet point is a marking point, unless otherwise stated, and each point made by the candidate must be identifiable and comprehensible.	
One mark is to be awarded for each marking point covered. For elaboration of a marking point also award one mark UNLESS otherwise stated. Refer to levels for D3	

Question Number	Question	
D1 (a)	Brian is a competitive show jumper. Over the past year, Brian has improved his riding position on a horse and his course time, and he is now able to jump higher fences without fault.  Explain how <b>one</b> psychological technique to improve sporting performance could be used to improve Brian's show jumping.	
	Answer	Mark
	One mark per point/elaboration. If more than one technique, mark all and credit the best. No ID mark. Credit any suitable technique.  Max 2 marks if no reference to Brian/showjumping  e.g. Imagery  Brian could use imagery to visualise jumping the more tricky jumps or imagine the feeling of winning and receiving a jumping trophy/eq;  imagery can involve visualising the jumps, riding position needed, the course direction/eq;  imagery requires Brian visualising and feeling the desired goal/eq;  imagery allows Brian to put themselves 'mentally' into the situation of winning which acts as a motivation/eq;  mental rehearsal of the imagery can increase familiarity and confidence and reduce anxiety for Brian/eq;  cognitive general imagery involves the imagining of overall success/eq;  cognitive specific imagery concerns picturing success at a specific skill for Brian such as jumping the pole/eq;	(3 AO1) Tied to b and c

<ul> <li>e.g. Goal setting</li> <li>Target/goal setting would involve Brian setting specific targets to achieve jumping and time performance/eq;</li> <li>Brian could set a goal of beating the timer as it would act as a motivation to succeed/eq;</li> <li>Brian's goal needs to be SMART because unsmart targets could be demotivating/eq;</li> <li>Brian's goals must be Specific, Measurable, Achievable /attainable /appropriate, realistic and time measured/eq;</li> <li>Goals can be performance based on a specific skill or outcome based on overall winning/eq;</li> <li>Specific targets should not be vague so that a specific goal can be focused upon eg higher jumps/eq;</li> </ul>		
<ul> <li>Measurable targets allow a benchmark to be set so that Brian's improvement can be monitored to show improvement/eq;</li> <li>Appropriate targets are relevant to the sportsperson/eq;</li> <li>Realistic targets are not too difficult or easy so demotivation through underperformance or unachievable aims for Brian/eq;</li> <li>Time based targets encourage and sustain motivation for appropriate time/eq;</li> </ul> Look for other reasonable responses	<ul> <li>Target/goal setting would involve Brian setting specific targets to achieve jumping and time performance/eq;</li> <li>Brian could set a goal of beating the timer as it would act as a motivation to succeed/eq;</li> <li>Brian's goal needs to be SMART because unsmart targets could be demotivating/eq;</li> <li>Brian's goals must be Specific, Measurable, Achievable /attainable /appropriate, realistic and time measured/eq;</li> <li>Goals can be performance based on a specific skill or outcome based on overall winning/eq;</li> <li>Specific targets should not be vague so that a specific goal can be focused upon eg higher jumps/eq;</li> <li>Measurable targets allow a benchmark to be set so that Brian's improvement can be monitored to show improvement/eq;</li> <li>Appropriate targets are relevant to the sportsperson/eq;</li> <li>Realistic targets are not too difficult or easy so demotivation through underperformance or unachievable aims for Brian/eq;</li> <li>Time based targets encourage and sustain motivation for appropriate time/eq;</li> </ul>	

Question Number	Question	
D1 (b)	Evaluate the psychological technique to improve sporting performance that you have explained in (a).	
	Answer	Mark
	One mark per point/elaboration TE: No credit for evaluating a different technique than the one described in (a). If (a) is not a psychological technique but is psychological and is related to sporting performance and (b) correctly evaluates the material in (a) then Max 2 marks. If (a) is blank, but (b) evaluates an appropriate technique, then full credit can be given.	(4 AO2) Tied to a and c
	<ul> <li>e.g. Imagery</li> <li>Feltz and Landers (1983) found that overall studies found imagery to be better than no mental imagery at all/eq;</li> <li>Imagery is not a substitute for physical practice/eq;</li> <li>Isaac (1992) found that high imagery trampolinists performed better the low and no imagery</li> </ul>	

<ul> <li>groups/eq;</li> <li>Research into imagery has been experimental, so the technique lacks field trials to achieve validity/eq;</li> <li>Imagery is quite specific and may lead to greater physical practice of the skill, which would account for the improvement rather than the imagery itself/eq;</li> </ul>	
<ul> <li>e.g. Goal setting</li> <li>Mellalieu (2005) found that SMART targets set for rugby players showed considerable sporting improvement in those skills compared to the skills that were not targeted/eq;</li> <li>Because self generated targets are most effective, this itself may be intrinsically motivational/eq;</li> <li>Targets that are unrealistic may not be achieved and act as a demotivator/eq;</li> <li>Goal setting, unlike imagery, is more likely to involve physical practice which will improve performance/eq;</li> </ul>	
Look for other reasonable marking points	

Question Number	Question	
D1 (c)	You will have studied one other psychological technique used to improve sporting performance which is different to the one you have used in (b).  Explain why this different psychological technique may be better for Brian to use.	
	Answer	Mark
	Refer to levels. No identification mark. TE: No credit for repetition of technique described in (a)  1 mark A brief and basic outline of how a psychological technique may be better.	(2 AO2) Tied to a and b
	<ul> <li>2 marks A fully explained description of how an alternative technique may be better Indicative content e.g.Imagery <ul> <li>Would be a better technique for Brian to use as he can reduce anxiety through imagining each obstacle or winning</li> </ul> </li> </ul>	
	e.g. Goal setting	

Would be a better technique because internally generated targets are more motivating than external reinforcements such as praise from the coach	
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Question	Question	
Number		
D2 (a)	Carmela wants to investigate whether personality traits are associated with sporting performance. She has decided to conduct a questionnaire to gather her data.  Describe how Carmela might use a questionnaire to gather data on <b>both</b> personality <b>and</b> sporting performance.	
	Answer	Mark
	Mark according to the levels below. Max level 2 if no reference to Carmela/personality/sporting performance	(4 AO3)
	Features may include: sample, apparatus/data collection, location, design, controls, design decisions	
	<ul> <li>Indicative content</li> <li>Personality tests are a specific type of questionnaire/test that can measure aspects of someone's personality</li> <li>Athletes can be asked questions about their current wins/losses to gauge sporting performance</li> <li>The questionnaires on performance can be repeated to see if there is any change in performance.</li> <li>Questionnaires can gather self report data using open questions and/or closed questions to investigate personality traits or current performance</li> <li>Carmela can gather qualitative (open questions) and/or quantitative data (closed questions) to analyse</li> <li>She might have to question the team individually to prevent others influencing answers</li> <li>Anonymous questionnaires would help prevent social desirability</li> <li>Carmela might decide to see if there was a relationship between personality and performance through a correlation from her questionnaire data</li> </ul>	
	Look for other reasonable marking points.	
	Levels	
	0 mark No rewardable material	
	1 mark Procedure of the study to investigate personality and performance issues is difficult to replicate. Either sporting performance or personality attempted. May be no reference to Camela/sporting performance	
	2 marks A procedure is identifiable and plausible. Sporting performance	

and personality attempted or either done well. May be no reference to Camela/sporting performance

3 marks

Procedure of the study to investigate personality and performance issues is easy to follow and with enough detail to allow partial replication. Both sporting performance and personality done well. Must refer to scenario in at least one way

4 marks

Procedure of the study to investigate personality and performance is very easy to follow and with enough detail to permit a good replication of the study described. Both sporting performance and personality done well and have included a range of procedural decisions (e.g. sample, ethics, data analysis). Must refer to scenario in at least one way

Question Number	Question	
D2 (b)	Once Carmela received her completed questionnaires from participants, she decided to use a correlation on the findings.	
	Explain how Carmela could use a correlation to analyse her findings.	
	Answer	Mark
	One mark per point/elaboration. Max 2 marks if no reference to Carmela/findings.	(3 AO3)
	<ul> <li>The results of the questionnaire/number of wins are calculated and quantified into one score for each measure of personality and performance/eq;</li> <li>Each score is ranked for each individual, such as how extravert someone is, and compared to the scores of other participants/eq;</li> <li>The scores are placed in a scattergraph for Carmela to visually detect any link/eq;</li> <li>If the points on the graph rise together it is a positive correlation and if the points decline it is a negative correlation, random points can suggest no correlation/eq;</li> <li>Carmela would use a line of best fit would be used to judge the deviation of points from a trend analysis/eq;</li> <li>A (Spearman's rho) statistical test is used to find the correlation coefficient that would establish whether the link between performance and personality is significant/eq;</li> <li>The coefficient is used to determine the relationship as positive, negative or no correlation for Carmela/eq;</li> <li>If Carmela found -1 indicates a perfect negative correlation, 0 indicates no correlation and +1 indicates a perfect positive correlation/eq;</li> </ul>	

Coefficients between +/-1 but not 0 show some/weak/moderate degree of correlation so Carmela would need to interpret her findings/eq;	
Look for other reasonable marking points.	

Question Number	Question	
D2 (c)	Outline one weakness of the correlation method that Carmela should have considered in her research.	
	Answer	Mark
	One mark per point/elaboration. No credit for strengths	(2 AO3)
	<ul> <li>Correlations cannot be used to detect relationships that are non-linear(curvilinear relationships)(1<sup>st</sup> mark)/eq; nor can they be used to measure interactions between more than two variables (2<sup>nd</sup> Mark)/eq;</li> <li>Carmela/correlations cannot establish cause and effect (1<sup>st</sup> mark) /eq; so we cannot be certain that personality determines performance (2<sup>nd</sup> mark) /eq;</li> </ul>	
	<ul> <li>non-linear(curvilinear relationships)(1<sup>st</sup> mark)/eq; nor can they be used to measure interactions between more than two variables (2<sup>nd</sup> Mark)/eq;</li> <li>Carmela/correlations cannot establish cause and effect (1<sup>st</sup> mark) /eq; so we cannot be certain that personality</li> </ul>	

Question Number	Question	
D3	Describe <b>and</b> evaluate the Inverted U Hypothesis as an explanation used in sport psychology. In your evaluation you must compare the Inverted U Hypothesis with a different explanation of the effects of arousal, anxiety and/or the audience in sport psychology.	
	Indicative content	Mark
	Appropriate answers might include the following knowledge, but this list is not exhaustive.	(12 AO1/2)
	Well labelled diagrams with supporting explanations can be accepted	
	<ul> <li>Description</li> <li>The inverted U hypothesis is a biological theory that explains sporting performance relating to arousal and anxiety.</li> <li>Arousal is important in sport as it can improve performance.</li> <li>An optimum point is reached where peak performance is achieved.</li> <li>Too much arousal results in a loss of physical performance.</li> <li>According to the Yerkes-Dodson law, moderate arousal results in optimum performance, but it really depends upon the type of sporting activity and experience level of the individual.</li> <li>Fine motor control sports are better performed in a low state of arousal.</li> <li>Complex sports are best performed in a state of low arousal.</li> </ul>	

- High strength/power sports are best performed in high state of arousal.
- Simple tasks are better performed in high arousal state.

#### **Evaluation**

- Experienced sportspeople can perform well with high arousal as there is less need to focus on a well practised task.
- Novices practise tasks using low arousal as concentration is needed in learning a new skill.
- The catastrophe model points out that increases in anxiety may not result in a gradual drop in performance, as even a modest increase in anxiety can result in a lull in sporting performance following the optimal arousal level.
- The inverted U hypothesis can be usefully applied to help psyche up or relax a sportsperson to achieve the optimal level of arousal needed for the type of sport and individual.
- Experimental research to test the inverted U hypothesis has used techniques to relax or psych out an individual (threat or incentive) which may cause anxiety/ego rather than arousal.
- More recent multidimensional theories have tried to bridge the gap between physical arousal and cognitive factors associated with sporting performance.
- If skilled sportspeople need higher levels of arousal to perform, this might explain why records are broken more frequently at large important events where pressure is very high.
- Lowe's (1974) Little League study found that baseball performance was better in moderate conditions rather than critical or non-critical conditions during a game, supporting optimal performance.
- A field study by Klavora (1978) followed a basketball team during a competition and found that coaches assessments of performance related to standing in the tournament (high or low standing led to worse performances).
- Can explain how an audience can have an effect on performance.

## Comparison

- The inverted U does not take into account variables associated with the audience and expectation of being viewed as evaluation apprehension theory does.
- Like evaluation apprehension it believes that arousal affects performance.

Look for other material

Lovel	Mork	Docarintar
Level	Mark	Descriptor  AO1: Knowledge and understanding of psychology and how
		psychology works.
		AO2: Application/evaluation of knowledge and understanding of
		psychology and how psychology works.
	0	No rewardable material
Level 1	1-3	<ul> <li>Brief description of the inverted U hypothesis showing a basic understanding of how arousal affects performance.</li> <li>Description of inverted U hypothesis is attempted/brief/diagram</li> <li>Little or no attempt at the analytical/evaluation demands of the question. No comparison made.</li> <li>Lack of relevant evidence. The skills needed to produce effective writing will not normally be present. The writing may have some coherence and will be generally comprehensible, but lack both clarity and organisation. High incidence of syntactical and /or spelling errors.</li> </ul>
Level 2	4-6	Description OR evaluation only OR limited attempt at each OR one is in less detail than the other.  • Description of the inverted U showing basic understanding and reference to sport/performance  • Evaluation includes appropriate strength(s) / weakness(es). There may be no comparison made.  Candidates will produce statements with some development in the form of <b>mostly accurate</b> and relevant factual material. There are likely to be passages which lack clarity and proper organisation. Frequent syntactical and /or spelling errors are likely to be present.
Level 3	7-9	<ul> <li>Candidate has attempted and answered both injunctions well.</li> <li>A good description of the inverted U hypothesis.         AND         Evaluation includes appropriately explained strengths / weaknesses. Attempt at a comparison is made.         The candidate will demonstrate most of the skills needed to produce effective extended writing but there will be lapses in organisation.         Some syntactical and /or spelling errors are likely to be present.     </li> </ul>
Level 4	10-12	<ul> <li>Candidate has attempted and answered both injunctions very well.</li> <li>Description must include a detailed and accurate understanding of arousal and the effect on performance in depth (e.g. could include the effect on different types of sport, biological detail, and/or whether beginner or expert etc.)</li> <li>Evaluation includes appropriate strengths / weaknesses discussed accurately, and a clear accurate comparison made.</li> <li>The skills needed to produce convincing extended writing are in</li> </ul>

information is present.		place. Very few syntactical and /or spelling errors may be found. Very good organisation and planning. Given time constraints and limited number of marks, full marks must be given when the answer is reasonably detailed even if not all the information is present.
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