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Mark Scheme

January 2013 (Results)

GCE Psychology (6PS03) Paper 01
Applications of Psychology

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General Guidance on Marking – GCE Psychology

All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last

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. 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.

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.
4 Phrases/words in **bold** indicate that the meaning of the phrase or the actual word is **essential** to the answer.
5 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. **TOPIC A: Questions A1(b), A1(c) and A3 are marked according to levels indicated.**	

Question Number	Question	
A1 (a)	Loftus and Palmer (1974) conducted a laboratory experiment to investigate eyewitness testimony. Describe what the participants were asked to do in this study.	
	Answer	Mark
	No credit for aim, results and conclusions. Creditworthy answers should be focused on what the participants did and not what the researchers did or why, e.g.' the verbs implied a different speed' – no credit as not what the participants did. Experiment one • Participants were asked to view **seven**/**health and safety** video clips of different car accidents/eq; • Participants were asked how fast was the car going when it either [at least two of] 'smashed', 'hit', 'bumped', 'collided' or 'contacted'/eq; • Participants were asked to give a description of the accident and answer a questionnaire/eq; • Participants were asked to complete a questionnaire with a *critical question* about the speed the car was travelling/eq; • Participants were either asked to judge the speed of car when it 'hit', 'smashed' or no critical question was asked of them/eq; Experiment two • Participants were asked to watch a short video clip of a multiple car crash/eq; • Later, participants were asked to decide whether or not there was broken glass seen in the clip/eq; **Look for other reasonable marking points.**	**(3 AO1)**

	Guidance	
	Use the levels below to allocate marks according to how detailed the answer is and how thorough the information. Giving marks for elaboration where appropriate is particularly important where questions such as this are suitable to stretch and challenge candidates, so that the full range of marks are available.	

Question Number	Question	
A1 (b)	Laboratory experiments are often criticised for lacking validity. Explain how problems with validity may affect laboratory research in criminological psychology. In your answer you must refer to how the laboratory experiment is used in criminological psychology.	
	Answer	Mark
	One mark per point/elaboration. Four marks available for definition(s) of (any type of) validity and appropriate explanation. Max 2 marks for a non-contextualised answer that is generic and not linked to criminological psychology in any way. • validity is measuring what is intended/ecological validity is about realism. • low ecological validity means the findings are not real life/as would be found in the context of real criminal behavior/eq; • with good controls the researcher can isolate the variables to be sure they are measuring what they intend to/eq; • low population validity means the results cannot be generalized to all potential witnesses/eq; • lab experiments may lack the emotionality of a real criminal event so are not valid as a representation of real life/eq; • a lab event that is staged does not truly reflect spontaneous events that a real witness might experience/eq; • giving participants a questionnaire does not reflect the level of consequence experienced by a real witness/eq; • Lack of realism can lead to participants trying to guess the aims of the study and alter their behavior so they do not behave naturally/eq; **Look for other creditable content.**	**(4 AO3)**

Question Number	Question	
A1 (c)	Loftus and Palmer's (1974) study involved laboratory research and has been criticised. Outline **two** ways in which Loftus and Palmer's (1974) study might have been improved.	
	Answer	Mark
	Two marks for each suggestion for improving the study. So use the levels twice for each way of improving the study. If more than two suggestions, mark all and credit the best. There may be valid overlap with each suggestion but with different reasons or effects, please contact your team leader if unsure. Ignore 'do a field experiment' without some qualification or example. **0 marks** No creditable material **1 mark answer** Brief or basic suggestion for improving of Loftus and Palmer's (1974) study. **Indicative content** e.g., Get participants to witness real car crash. e.g., Participants could have been interviewed by police. e.g., Conduct the experiment in a realistic environment with a realistic event like a witness would experience. e.g., By asking participants whether they were affected by the verb. e.g., By using a more varied sample of participants. **2 mark answer** Suggestion is detailed and/or well explained in terms of improving Loftus and Palmers (1974) study. **Indicative content** e.g., Participants could have been placed in a naturalistic environment to witness a real crash/incident so that their response was more naturalistic and external factors would have played a realistic effect. e.g., If participants were interviewed by the police they would have gained a real sense of what it would be like to be a witness compared to an unimportant, inconsequential questionnaire. e.g., participants may have been affected by the verb rather than a real change in memory, so participants could have been recalled at a much later date to see if the speed they first gave endured. e.g., using a more varied sample of participants would have reflected a real witness situation and account for the variety of individual difference known to influence witness recall. **Look for other creditable content.**	**(4 AO3)**

Question Number	Question	
A2 (a)	During your course you will have learned about one of the following studies: • Yuille and Cutshall (1986) (*A case study of eyewitness memory of a crime*) • Charlton et al (2000) (*Broadcast television effects in a remote community*) • Gesch et al (2003) (*Influence of supplementary vitamins, minerals and essential fatty acids on the anti-social behaviour of young adult prisoners*) Evaluate **one** of these studies in terms of reliability.	
	Answer	Mark
	One mark per point/elaboration. Max 1 mark for generic evaluation e.g. reliability, that is not made specific to the study. Ignore obvious validity issues (e.g. ecological validity). The name of the study is for convenience in marking, it is not an element of the evaluation so if the name does not match the evaluation it is of no concern if the evaluation can be identified as from a study in the list. Mark the evaluation only. Yuille and Cutshall (*A case study of eyewitness memory of a crime*) • They only used operationalised features that definitely occurred in the incident to compare with witness accounts to make the study reliable/eq; • Qualitative accounts were scored into quantitative data, so subjective interpretation may make findings unreliable/eq; • Participants/witnesses may have had time to converse about the incident or read up facts in the media, making their accounts more accurate later/eq; • It was a one-off incident so cannot be repeated to test the reliability of the findings/eq; • Many variables could have affected recall in the field, so lack of control could make findings unreliable/eq; • Contradictory research questions the reliability of the findings that leading questions have an influence (e.g. Loftus and Palmer)/eq; Charlton et al (*Broadcast television effects in a remote community*) • Many variables affecting viewing habits could not be controlled so findings may be unreliable/eq; • Video recording can be cross checked to ensure accurate and consistent measurement of behaviour/eq; • Inter-rater reliability was established between raters coding children's behaviour in the school/eq; • Due to the unique nature of the Island, it is unlikely the same conditions would be found on the mainland/eq; • The findings of this study are not consistent with similar research investigating behaviour before and after TV is introduced (e.g. Williams) making the findings unreliable/eq; Gesch et al (*Influence of supplementary vitamins, minerals and essential fatty*	**(3 AO2)**

	acids on the anti-social behaviour of young adult prisoners) • There may have been offences that were not seen so not reported/eq; • There may have been changes in the prison (policy, group dynamics) that may have affected the findings/eq; • Prisoners may not have taken the vitamin supplements even if they should have, leading to unreliable findings/eq; • The prison environment was controlled to a greater extent that more everyday environments, so greater reliability could be established/eq; **Look for other reasonable marking points.**	

Question Number	Question	
A2 (b)	Most psychological research raises ethical issues for the participants involved or for society. Compare **two** studies you have learned about in criminological psychology in terms of ethical issues. In your answer make it clear which two studies you are comparing.	
	Answer	Mark
	One mark per comparison made and subsequent elaboration – both parts of the comparison need to be explained. Max 1 mark for described studies with no explicit comparison (e.g. one study described followed by the other study described). Studies must be related to criminological psychology for credit. As such, studies such as Bandura, Rosenthal and Jacobsen, Jahoda etc can be used. Please consult your team leader if you are unsure whether a study is appropriate to use. 1 mark for an appropriate identification of an ethical issue AS APPLIED TO THE STUDY SPECIFICALLY that can be used to compare two studies, and a further mark for the explanation/elaboration of that point which is sufficient difference or similarity up to two marks max for each comparison. There are two ways of interpreting this question: 1. Comparison of the same ethical issue, e.g. comparing informed consent. **2.** Comparison of overall ethics – good and bad/high and low. **Treat this as one comparison** E.g., Yuille and Cutshall (1986) and Loftus and Palmer (1974) • Both studies deceived participants about the use of the critical question/eq; participants were unaware of the placement of the misleading questions 'smashed/bumped' AND/OR 'yellow/blue quarter panel'/eq; • Participants were protected in Yuille and Cutshall's study as they were not forced to view an incident/eq; it was naturally occurring unlike Loftus where participants were shown a video incident/eq; • Loftus and Palmer's video recording of a car incident could be said to be less traumatic than reliving a real incident unlike Yuille and	**(4 AO2)**

	Cutshall's participants/eq; who had witnessed a real shooting **OR** asking real participants to relive a real incident involving a death/shooting, is more traumatic than asking them to report on a health and safety video/eq; • Both Loftus and Palmer and Yuille and Cutshall gained participant consent to take part in the research both knowing parts of the procedure such as viewing a video/reliving an event/eq; However Yuille and Cutshall offered greater information and this was demonstrated by participants opting out of reliving the event due to stress/eq; • Yuille and Cutshall offered a more robust means of opting in to take part in the study compared to Loftus and Palmer due to it being a real life traumatic incident/eq; this was shown by only 13 of the participants (not the victim) choosing to take part/eq; E.g., Charlton (2000) and Gesch (2003) • Charlton did not manipulate the environment of the participants unlike Gesch/eq; who directly administered pills to prisoners to study its effect/eq; • Gesch foresaw improvements in prisoners health and wellbeing, however, Charlton foresaw media violence, so there may have been an issue of researcher competence/eq; Gesch believed that the pills might improve behaviour of the prisoners whereas Charlton may have known that the introduction of TV on the Island could have had a harmful effect/eq; OR Charlton's experiment was natural therefore he was not responsible for the direct administration of the IV/eq; • There may have been an issue of consent for both Charlton and Gesch as participants were children and prisoners/eq; Being prisoners, the participants in Gesch's study may not have been willing volunteers because of their circumstances, whereas explicit permission to study the children in Charlton's study was given by parents/eq; • There may have been an issue of right to withdraw for both the Islanders and prisoners/eq; The Islanders had explicit right to withdraw from the study, whereas the prisoners may not have felt that they had the facility to withdraw themselves/eq; **Look for other reasonable marking points/studies.**	

Question Number	Question	
A3	The influence of the media on anti-social behaviour can be explained by using social learning theory. Describe and evaluate the possible role of the media in creating anti-social behaviour. In your evaluation you must compare the role of the media as an explanation of anti-social behaviour with a different explanation of anti-social behaviour **at least once**.	
	Indicative content	Mark

	Mark according to the **levels** given. Appropriate answers might include the following knowledge, but this list is not exhaustive. Indicative content **Description** • Social learning theory can account for the role of the media as it explains behaviour being observed and copied. • The media portrays role models for viewers to identify with. • Role models are popular, powerful and likable so more likely to be modelled. • Role models are reinforced/rewarded for violent behaviour, encouraging modelling. • Very few negative consequences of violence are seen, so vicariously reinforces aggression and violence. • Media glamorise violence making it more appealing. • Video games actively reward game players for violent acts. • SLT explains that anti-social behaviour can be acquired through the process of attention, retention, reproduction and motivation. **Evaluation** • Content analyses of the media show a high level of aggression and violence even in children's programming which would be statistics that support the idea of observational learning of aggression. • Rideout calculated 70-80% of programmes containing acts of violence which supports SLT of aggression. • Both adults and children watch a high volume of violent programmes (38 and 25 hours respectively) so it could be expected to have an influence on behaviour. • Williams et al, found that increased exposure to media encouraged anti-social behaviour. • Charlton et al found that aggression amongst children did not increase with increased media exposure. • However, Charlton's findings may be due to nature of Island community/close surveillance so findings may not be reliable. • Bandura, Ross and Ross, found that children copy a narrow range of aggressive behaviours from adult role models. • Bandura's findings extend to watching the role models on TV and cartoon portrayals of the same behaviours. • Case studies such as Ryan and Columbine offer **limited** evidence for modelling of aggression from the media as such cases are very rare indeed and offer tentative links. • The Bulger case has shown **no significant** link between media violence and modelling. • Anderson and Dill found increased aggression following playing violent video games such as Wolfenstein compared to Myst. • Bartol found aggression levels to increase when playing more violent bloody video games. • Media violence may be cathartic, reducing aggression rather than encouraging it.	**(12 = 6 AO1 6 AO2)**

	Comparison • The role of the media does not account for other influences on violent behaviour such as self-fulfilling prophecy, which explains aggression as a result of labelling and internalisation of label rather than observational learning. • Jahoda found that males born on a Wednesday, and expected to be aggressive, were more likely to have a criminal record than those born on a Monday (placid). This offers support for this alternative suggestion. • Both social learning theory/the role of the media and SFP suggest that other people in our social world influence whether or not we are aggressive. • Eysenck's theory is more biological than the role of the media, suggesting that some people are predisposed to being aggressive due to their nervous system. • Eysenck suggested that behaviour was a mix of both biology and the environment, SLT focuses solely on the environment. • SLT is on the nurture side of the nature nurture debate whereas Eysenck is both nature and nurture. • Twin and adoption studies have shown a link between aggression and genetics to support a biological explanation rather than an explanation such as SLT that focuses on the environment. **Look for other creditable 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. • A brief and basic outline of the role of the media/SLT • Little or no evaluation • Little or no comparison made 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 the role of the media, may be focused more on SLT theory with no media context. AND • Limited evaluation with at least **one** well expressed point. Or • Limited comparison with another explanation. Candidates will produce statements with some development in the form of **mostly accurate** 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 both the injunctions of the questions **well**. • Good description of the role of the media, not solely basic SLT theory, but embedded in the context of antisocial behaviour and the media. • Good evaluation (one evaluation made well or more than one evaluation stated), including strengths and/or weaknesses well expressed. AND/OR (evaluation/comparison are both AO2 so comparison can act as evaluation). • Good comparison (one comparison well made or more than one comparison) made between the role of the media and one other theory. 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 ***both the injunctions*** in the question **very well**. • Very good description of the role of the media – focused on the question and well detailed. • Very good evaluation including more than one evaluation point made well incorporating strengths and weaknesses/research evidence. AND • There is very good comparison point made with alternative theory - well expressed. 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

	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. **TOPIC B: Questions B2(b) and B3 which are marked according to the indicated levels.**	

Question Number	Question	
B1(a)	Describe the structured observation research method as it is used to study the behaviour of children. You must refer to children's behaviour in your answer.	
	Answer	Mark
	One mark per point/elaboration. No credit for naturalistic observations of naturally and spontaneously occurring behaviour (taking on board that a structured observation can be done in a natural environment and still be structured). **Max one** mark for standard and exclusive descriptions of the strange situation as a procedure, however, give credit if used to exemplify the methodology of a structured observation and is not solely a description of the strange situation as used by Ainsworth. Max 2 marks overall if no reference to children. • It is usually conducted in an artificial situation such as a laboratory/eq; • The procedure is contrived/set up to involve a task or situation in which the behaviour of the child is observed/the procedure is contrived to involve a series of stages such as a caregiver leaving and stranger entering a room/eq; • Typically an observer/video camera records the behaviour/emotional reaction of the child/Typically an observer records the reaction of the child when a caregiver leaves the room and stranger enters/eq; • Furniture/surroundings may be set up to ensure the child is comfortable in the situation/eq; • Sometimes a one-way screen is used so that the presence of observers does not affect the behaviour of the child/eq; • The strange situation set up a procedure of caregiver and stranger entrance and exits to observe the reactions of the children/eq; **Max 1 as relates to SS specifically** **Look for other reasonable marking points.**	**(4 AO3)**

Question Number	Question	
B1(b)	Evaluate the structured observation research method. In your answer make **at least one** comparison point with the naturalistic observation research method.	
	Answer	Mark
	One mark per point/elaboration Comparison is evaluation and no max is set on comparison. Max 4 overall if no comparison to the naturalistic observation method. • The observer may be biased and interpret the findings according to prior assumptions/eq; • The structured observation lacks ecological validity because the child is placed in an unnatural environment/lab, in which the behaviour of the child may not be spontaneous and natural/eq; • The task involved in a structured observation may (or may not) be a strange or unusual task that they may not encounter in such a contrived way in their home/eq; • There may be subjective interpretation leading to inconsistency between observers/eq; • Typically inter-rater reliability is established by comparing interpretations between two or more researchers/eq; • Video recordings can be used to check for reliable findings as it can be viewed more than once by more than one person/eq; • The procedure is to some degree standardised so that the same situation can be recreated for another child and therefore reliable findings should be drawn/eq; • The highly controlled environment controls for and eliminates variables that could lead to unreliable findings/eq; • The ethics of using children in the structured observation should be considered such as causing undue distress so the behaviour of the child should be monitored and procedures stopped if distress is detected/eq; Comparison points: • The structured observation has less ecological validity than the naturalistic observation as the environment is artificial/eq; • The structured observation is set up so behaviour measured may not be as spontaneous as behaviour observed using the naturalistic observation method/eq; • Children in the lab are more likely to show demand characteristics than in the natural environment because they are aware of taking part in something strange or different to their normal routine, so may alter their behaviour accordingly unlike naturalistic observations/eq; • In a naturalistic observation the researcher has to wait for the behaviour to be displayed whereas in a structured observation a contrived situation can be used to encourage the behaviour more readily/eq; **Look for other reasonable marking points.**	**(5 AO3)**

Question Number	Question	
B2(a)	During your course you will have learned about one of the following child psychology studies that have real life applications: • Bowlby (1944/1946) • Belsky and Rovine (1988) • Rutter and the ERA study team (1998). Describe the findings (results and/or conclusions) of **one** study from the list.	
	Answer	Mark
	One mark per point/elaboration. If more than one study described, mark all and credit the best. No credit for aims and procedure. **Accept figures + - 10 %. Note + - 2 for Bowlby.** Bowlby (1944/6) • 14 (+-2)/44 thieves were classified as 'affectionless'/eq; • In the control group no boys were classified as 'affectionless'/eq; • 17(+-2)/44 juvenile thieves had experienced long term separation from their caregiver for more than a six month period/eq; • Only 2(+-2)/44 control group had suffered the same separation/eq; • Of the 17 (+-2)that had suffered prolonged separation, 12(+-2) were also classified as affectionless/eq; • There were no affectionless psychopaths in the control group/eq; • Maternal deprivation when young causes issues such as lacking emotion and feelings of guilt/remorse, which may account for criminal behaviour/eq; Belsky and Rovine (1988) • Young (under 12 months) children experiencing intensive prolonged non-maternal care were more likely to show avoidant attachment type (43%)/eq; • Children with less than 20 hours non-maternal care were less likely to show avoidant attachment type/eq; • Boys in 35 hours or more of non-maternal care had more insecure attachments with fathers compared to other boys experiencing less non-maternal care/eq; • Prolonged separation due to day care at a young age adversely affects attachment type as measured by the strange situation/eq; • Daycare has a **negative** impact upon children's development/attachment to the caregivers/eq; Rutter and the ERA team (1998) • Orphans adopted at 6 months had caught up with English children in terms of physiological measures and cognitive level/eq; • Orphans adopted after 6 months of age made some progress but not as much as those adopted earlier/eq; • Many orphans had signs of attachment disorder/eq; • Poor quality care when young has a negative impact upon development and slows the rate or recovery when prolonged/eq; **Look for other reasonable marking points.**	**(3 AO1)**

	Guidance	
	Use the levels below to allocate marks according to how detailed the answer is and how thorough the information. Giving marks for elaboration where appropriate is particularly important where questions such as this are suitable to stretch and challenge candidates, so that the full range of marks are available.	

Question Number	Question	
B2(b)	Explain **one** practical application of the study you have described in (a).	
	Answer	Mark
	Mark according to the levels below. No credit for restating the findings of the research stated in a. The answer **must go beyond** the findings. The application here must match the study in (a) – see TE. TE: If the practical application does not match the study findings described in (a) but is a practical application of an identifiable study from the list in (b) and done very well, max level 1. If (a) is blank but (b) correctly explains a practical application of an identifiable study from the list, full credit can be given. If (a) describes a study NOT from the list and (b) gives practical applications no marks can be given. If (b) is **not** a practical application of the study described in (a) (e.g. daycare application for the Rutter ERA study which is not even tentatively made relevant by the candidate) then no marks should be awarded. **0 marks** No creditable material **1 mark answer** Brief and/or basic practical application that does little to add to the research findings. **Indicative content** e.g., Get mothers to work less by offering them incentives for staying at home (for Belsky). e.g., provide accommodation for the parent to stay with the child at hospital. e.g., Improve quality of care at the orphanage to allow for attachments to be formed. e.g., foster children into families/adoptive families earlier (for Rutter). e.g., encourage parents to be aware that separation may lead to anti-social behaviours in their children. **2 mark answer** Well expressed practical application of research findings that goes well beyond the research conclusions drawn and offers sensible answer. **Indicative content** e.g., Good quality daycare with consistent low staff turnover so	**(2 AO2)**

	substitute attachments can be formed. e.g., Offer caregiver's incentives to work part time to reduce time spent in non-maternal care to ensure that bond disruption is kept minimal. e.g., Offer accommodation for parents to stay with their children overnight in hospitals to avoid bond disruption. e.g., The culture of orphanage care must be addressed, such as ensuring the psychological and emotional wellbeing of the child rather than just their physical needs so secure attachments can be formed. e.g., foster/adopt children from orphanages earlier so that attachments can be formed with non-maternal caregivers before the sensitive period is over. **Look for other creditable material.**	

Question Number	Question	
B2(c)	Evaluate the study you described in (a) using issues **other than** practical applications.	
	Answer	Mark
	One mark per point/elaboration. No credit for practical applications. TE: If the evaluation in (c) does not match the study described in (a) but evaluates a study from the list and is identifiable, max 2 marks can be given. If (a) is blank, but (c) evaluates an identifiable study from the list, all marks can be given. If (a) is wrong (not a study from the list) and (c) evaluates the wrong study, max 2 marks can be given if the study described and evaluated is from the child application/topic. Bowlby (1944) • Bowlby's findings may suffer from researcher bias as he interpreted his findings in light of his theory/eq; • 17 of the thieves suffered maternal deprivation but 27 did not, he cannot conclude that maternal deprivation caused later delinquency/eq; • The reasons for the separation rather than the separation itself may have caused the problems/eq; • Bowlby collected vast amounts of data from interviews with the boys and their families, so the information was in-depth and detailed/eq; • Triangulation was used to cross check findings of psychiatric tests and interview data/eq; • An independent social worker was used to maintain objectivity in data collection and analysis/eq; • The control group was not a 'normal' control, which makes comparison difficult/eq; Belsky and Rovine (1988) • They used the strange situation which has been criticised for lacking realism associated with everyday separation/eq; • The children were put under a degree of distress as a result of the procedure/eq; • The strange situation is commonly used and a standardised test of attachment, so in this sense it has reliability/eq; • The experience of daycare can be affected by other variables, such as socio-economic status and job satisfaction of the mother, these were not examined/eq; • As longitudinal studies, they were able to study the long term developmental changes of the groups of children to track development/eq; • The study focused exclusively on attachment types (emotional and social development) so could be criticised for ignoring other aspects of child development such as aggression/IQ/peer relations/eq; • The type of daycare (quality) may have affected the outcome of the studies/eq; Rutter and the ERA team (1998) • Long term study was conducted to track development into adolescence rather than a snap shot of behaviour being measured/eq;	**(4 AO2)**

	• It was difficult to establish the type of care received at the orphanages and reasons for adoption, which could have affected their development/eq; • Romanian orphanages are reputed to be poor, due to economic reasons, so the findings would not apply to other orphanage children/eq; • Both physiological and psychological measures collected a vast amount of developmental information on the children to track development over time/eq; **Look for other reasonable marking points.**	

Question Number	Question	
B3	Yolande was expecting her first child so she bought some child development books on attachment and read about the importance of bonding with her new baby. Using psychological research, describe and evaluate the evolutionary basis of attachment. In your answer you **must** include how the evolutionary basis of attachment could explain the bond between Yolande and her child.	
	Indicative content	Mark
	Mark according to the levels given. Credit should not be given for Bowlby's general theory but only evolutionary basis of attachment. Appropriate answers might include the following knowledge, but this list is not exhaustive. **Indicative content.** **Description** • Attachment between primary caregiver and child is the most critical according to Bowlby as it has a basis for evolutionary continuity of a species. • Attachment occurs instinctively and is necessary for survival. • Attachment has evolved to aid protection of the young. • Proximity is maintained to protect the young from predation whilst vulnerable. • Babies display proximity promoting behaviours to encourage closeness and bond formation. • The child treats the main caregiver as a safe base to explore the world. **Explaining the bond** • Yolande would keep her child close to her to ensure attachment. • Yolande would understand that proximity aids the protection of her child. • Yolande would understand that her child will display behaviours such as crying to ensure closeness. **Evaluation** • Animal comparisons suggest that the evolutionary basis of attachment is very plausible. • Harlow found that monkeys use comfort figures as a safe base when anxious. • Lorenz found attachment in precocial species to be innate (imprinting). • Lorenz found that ducks/jackdaws imprinted quickly/in a critical period to the closest moving object, so this must be inbuilt. • Stressful stimuli/conditions hasten imprinting, supporting the notion of bonding aiding survival in adverse conditions to avoid predation. • Reed and Leiderman found evidence in Kenyan infants for imprinting to be an appropriate model of attachment for human babies as they showed similar patterns in attachment behaviours to animals.	**(12)**

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. • Basic and/or brief attempt to describe Bowlby's theory, which may or may not include evolutionary basis. • Little or no attempt to meet the evaluative demands of the question. • No reference to Yolande and/or her child. 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 OR reference to Yolande only done well, OR limited attempt at each OR one is in less detail than the other. • Limited description of evolutionary basis of attachment. Aspects of evolutionary theory may be present throughout the description but it is not the majority of description (likely to be MDH, IWM and so not focused on the question). AND • Limited evaluation of Bowlby's evolutionary theory (may be reference to other aspects of his theory that should be ignored). Or • Limited reference to Yolande and/or her child. Candidates will produce statements with some development in the form of **mostly accurate** 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 both injunctions **well**. • Good description of some aspects of the theory – including a good description of attachment and evolutionary basis (may be reference to other aspects of his theory). • Good evaluation including one evaluation made well or more than one appropriate evaluation point made relevant to evolutionary theory (may include other aspects of his theory so unselective at this level). • Explicit reference to Yolande and/or her child in terms of theory being used to understand development. 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 ***both injunctions*** **very**

		well. • Very good description of evolutionary basis for attachment (largely selective and therefore focused on evolutionary basis). • Very good evaluation covering a range of concepts expressed well and/or research used very well. More than one evaluation point well expressed and selective (largely based on the evolutionary basis of attachment and not other aspects of Bowlby's theory). • Good and explicit reference to explain how the theory can be used to understand Yolande's relationship with her child. 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. **TOPIC C: Questions C2(a) and C3 should be marked according to the levels indicated.**	

Question Number	Question	
C1(a)	Explain what is meant by the term 'tolerance' as it is used in the context of substance misuse. You may wish to use an example in your answer.	
	Answer	Mark
	One mark per point/elaboration. Reject answers referring to lay terminology. A well explained example can get one mark max. The answer MUST define tolerance first (as either the same amount of drugs not having the same effect or needing more drugs to achieve the same effect – see first bullets which can gain both marks) and then can access subsequent elaboration. Definition • The same dose of the drug will not achieve the same effect as previously did/eq; OR So they will need more of the drug to achieve the same effect as a small amount would have previously/eq; • So they need more and more of the drug to achieve the same effect as a small amount would have done previously/eq; Elaboration • Tolerance is achieved when someone takes a large amount of drugs for a prolonged period of time/eq; • It is a result of changes in the brain/neurotransmitters due to drug exposure/eq; • It results in high physical dependence and addiction/eq; • Example/definition: Heroin addicts who have used the drug for a long time will need more heroin to achieve the high that they previously had from small doses of heroin/eq; • Example/definition: if someone takes a lot of cocaine they often need more cocaine to reach the same high/eq; **Look for other reasonable marking points.**	**(3 AO1)**

Question Number	Question	
C1(b)	The Learning Approach has several theories that can be used to understand drug/substance misuse. You will have learned one of these theories. Outline **one** strength of **one** learning theory that explains drug/substance misuse.	
	Answer	Mark
	One mark per point/elaboration. The learning theory (SLT, OC or CC) should be clear in the answer, if not, credit only what seems appropriate from inferring which theory they are referring to (or mark all and credit the best). If more than one strength, mark all and credit the best. The second mark may be more accessible as elaboration does not need enormous depth compared to the first mark but it must follow on from the strength given. Social learning theory • Research into SLT is wide and covers many aspects of psychology, such as explaining the onset of drug taking through peers, demonstrating its explanatory power (**first mark**)/eq; Bandura for example has numerously conducted research to demonstrate modelling under laboratory conditions **(second mark)**/eq; • Social learning theory explains the difference in drug taking across cultures (first mark)/eq; In other cultures there may be an absence of drugs/specific drugs are used as others are seen to have a good time (second mark)/eq; • It takes into account reinforcement of the drug or vicarious learning which is a more holistic explanation (**first mark**)/eq; than classical conditioning or operant conditioning as it adds a cognitive dimension to the explanation (**second mark**)/eq; • It explains why the drug is taken in the first place as it is vicariously learned unlike classical conditioning(**first mark**)/eq; where drug misuse is only explained after the taking of the drug (**second mark**)/eq; • Often the first experience of some drugs is unpleasant ,so it provides no reinforcement for taking the drug again (**first mark**)/eq; as such social learning theory is a better explanation than operant conditioning in this case (**second mark**)/eq; Operant conditioning • It adequately explains why a drug is taken in the first place, for the euphoric high or peer reinforcement unlike classical conditioning (**first mark**)/eq; that only explains misuse after the initial taking of the drug (**second mark**)/eq; • Pickens and Thompson supports operant conditioning to explain substance misuse in rats (**first mark**)/eq; self reinforced cocaine	**(2 AO2)**

	addicted rats opted for cocaine over food/water suggesting addition is learned (**second mark**)/eq; • Operant conditioning has practical application in using token economy to reinforce non-drug taking behaviour (**first mark**)/eq; Glosser (1983) found reduced illicit drug taking in those on a token economy programme (14%) compared to a control (39%) (**second mark**)/eq; Classical conditioning • Classical conditioning explains successfully how the pleasure of taking a drug is achieved via association , many drugs give a sense of euphoria that is associated with drug taking and so explains addiction as found in Pavlov's research (**first mark**)/eq; Pavlov found that reflexes are involuntary so the association between drugs and euphoria are involuntary associations (**second mark**)/eq; • Classical conditioning trials have shown how a stimulus can be readily associated with pleasure (or pain) (**first mark)/**eq; Pickens and Thompson found that cocaine reinforced delivery of cocaine in rats (**second mark**)/eq; **Look for other reasonable marking points.**	

Question Number	Question	
C1(c)	Psychological theories, such as theories from the Learning Approach, have informed health campaigns to discourage recreational drug use. Evaluate **one** anti-drugs campaign that has been used to discourage the use of recreational drugs. Make it clear which campaign you are referring to.	
	Answer	Mark
	One mark per point/elaboration. Credit any campaign relating to drug misuse (e.g. Talk to Frank, Scared) check with your team leader if unsure. Max one mark if the campaign is not identifiable. British Heart Foundation • Used various media to give information, meaning that it reached lots of people in different ways so should be more effective/eq; • Hafsted et al (1997) found anti-smoking campaigns to have a positive emotional influence on smokers (particularly women) so this campaign should have been effective in reducing smoking/eq; • Mechanic et al (2005) assessed smoking campaigns to be generally effective in reducing smoking, so this finding should apply to the BHF campaign/eq; • Campaigns, such as the BHF are cost effective compared to the treatment of diseases associated with smoking/eq; • Some smokers may not have seen or heard about the campaign or not have known how to seek help which suggests that campaigns are not wholly successful/eq; • Other factors at the time, such as the smoking ban/advertising ban, may have reduced smoking rather than the campaign itself/eq; • It is impossible to measure the effectiveness of this campaign in particular as other variables could reduce smoking/accurate smoker statistics are not readily available (or could be compared to the campaign)/eq; • Fear tactics as used by the campaign may not be effective (Janis and Feshback, 1953) as although they generate an emotional response they may be ignored or minimised/eq; Talk to Frank campaign • Presented both sides of the argument, which is a tactic supported by Feshbach/eq; • Campaigns such as Talk to Frank are cost effective in terms of the treatment for drug addiction and social support needed for someone suffering drug addiction/eq; • Campaigns do not reach all affected, so Talk to Frank may not have reached all those it needed to/eq; • Talk to Frank extended the focus to family and friends as well as those affected by addiction directly, which may have made it more successful than directed campaigns/eq; • Using David Mitchell as a role model is a successful tactic shown in the meta analysis by O'Keefe/eq; • The advisors give sensible information based on prevailing ideas about drug use, however, these ideas are subject to change in medical opinion e.g. addictiveness of cannabis/eq; **Look for other reasonable marking points.**	**(4 AO2)**

	Guidance	
	Use the levels below to allocate marks according to how detailed the answer is and how thorough the information. Giving marks for elaboration where appropriate is particularly important where questions such as this are suitable to stretch and challenge candidates, so that the full range of marks are available.	

Question Number	Question	
C2(a)	A university asked its research team to conduct an experiment to study the effects of drugs on animals such as rats. Describe how the research team might conduct an experiment to study the effects of drugs on animals.	
	Answer	Mark
	Mark according to the levels below. No credit for human experiment. Ignore interviews, questionnaires and surveys. How they might conduct the experiment can involve ethics, method, design, apparatus and species. **0 mark** No rewardable material, no reference to animals or not an animal experiment. **1 mark** Some design decisions are considered but the animal study is not developed as an experiment. OR pure description of a named study e.g. Olds and Milner. **2 marks** Procedure /experimental method of the animal study into the effects of drugs could be followed with some detail. OR any description of their own study and relevant example from a named study. **3 marks** Procedure/experimental method of the animal study into the effects of drugs is very easy to follow and with enough detail to permit a good replication of the study described within the time constraints of the paper (such as a selection of 2 or 3 of sample, ethics, apparatus, location, design, controls, design decisions, variables, species). The three marks are achieved from their own description alone, any named example may be included in the answer but does not form part of the marks given. Indicative content – this list is not indicative of all that a candidate needs to achieve a level 3. • Select an appropriate animal to test drugs on, eg rats. • Determine levels of the IV, such as doses of drugs and type of drugs given. • Determine the DV as a behavioural/physiological measure (brain activity, odd behaviours). • Use controls (such as food intake/environment) to ensure only the drug affects behaviour. • Divide groups into animals that do/do not receive drugs. • Use qualitative measures to determine influence of drug on	**(3 AO3)**

	behaviour. • Use quantitative measures such as amount of drug taken. • Select apparatus such as feeding vessels, cages appropriate for the animal. • Gain a home office licence for using animals in research.	

Question Number	Question	
C2(b)	Before the experiment was conducted, the university rejected the research team's proposal on both ethical and practical grounds. Explain why animal research might be rejected on **ethical** grounds.	
	Answer	Mark
	One mark per point/elaboration. Ignore practical reasons and human ethical guidelines. Accept generic and specific (part a) ethical evaluation • They may have felt that the research may not apply to humans so the suffering caused to the animal is not justifiable/eq; • The potential for harm may have been greater than the benefits of the research as assessed by the university/eq; • The choice of species may have been deemed inappropriate as they would be more likely to suffer than another species/eq; • The researchers may have proposed using more animals than was necessary to study the effects of drugs, putting more animals at risk of harm than necessary/eq; • The researchers may have proposed using more drugs than necessary therefore exposing the animals to greater harm/eq; • Difficult to use animals if the species is protected/eq; • Having to adhere to strict guidelines and licences can make replication costly and difficult/eq; • The caging/harm/food/species used/environment was judged inadequate/inappropriate and a licence not granted/eq; **Look for other reasonable marking points.**	**(3 AO3)**

Question Number	Question	
C2(c)	Explain why animal research might be rejected on **practical** grounds.	
	Answer	Mark
	One mark per point/elaboration. Ignore ethical objections. • The university may have felt that the results would not be generalisable to humans/eq; • Rats (other animal) have different behavioural patterns to humans, and their response to drugs may be markedly different, so the findings are not usable/eq; • Human drug use is more complex/social/emotional than animals so isolating animals in the laboratory for study may not accurately reflect human drug taking/eq; • Animal research is costly (adherence to ethics is costly), and the university may have limited funding/eq;	**(3 AO3)**

	• Animal research requires specialist facilities and a licence which the university may not have available/eq; **Look for other reasonable marking points.**	

Question Number	Question	
C3	The Biological Approach can help us to understand substance misuse and can offer ways to treat drug addiction. Describe how the Biological Approach explains substance misuse **and** then evaluate drug treatment as it is used to treat heroin dependence.	
	Indicative content	Mark
	Mark according to the levels indicated. Appropriate answers might include the following knowledge, but this list is not exhaustive. **Description of the Biological Approach** • Drugs affect the biochemistry of the brain by depressant or stimulant effects. • Repeated use can change the normal neural pathways. • The natural production of a certain chemical/receptors no longer exists so the user has to take the drug to achieve any effect. • Recreational drugs are associated with the dopamine and serotonin systems in the brain, which are linked to pleasure. • Drugs produce a euphoric feeling via the biological system, which the user wishes to repeat. • Heroin reduces brain activity so dopamine is available for longer in the synapse. • Cocaine stimulates dopamine receptors to give pleasure feeling. • The hypothalamus is linked to pleasure, which is thought to be affected by taking drugs. • The mu-opioid gene has been linked to genetic transmission of addiction. • Family and twin studies have found that addictions run in families, suggesting a possible genetic link. **Evaluation of drug therapy** • Drug addicts with heroin dependency can break away from the criminal aspects of heroin abuse as they no longer require the finances to obtain illegal drugs so therapy in this sense is a good thing. • 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. • Reduced risk of needle sharing issues as oral administration so positive from a health level. • Controlled drug use has less risk of overdose as prescribed carefully. • If taken as a cocktail drug, with other substances, overdose can be a risk. • Substitute drugs may end up on the black market/eq; • There is always the risk of addiction/side effects associated with the substitute drug. • Blattler et al found that drug therapy was successful in reducing addiction and associated social and health issues.	**(12 AO1/2)**

	• Methadone as a treatment for heroin addiction is difficult to overdose on as it is supplied in controlled measures. • Often it is used alongside counselling to help with social support. • Drug replacement therapy for heroin can be very costly to the NHS and government when it is seen as simply replacing one drug with another. • Marsch's (1998) meta-analysis of methadone maintenance programmes support the efficacy of drug therapy in reducing heroin use, HIC and criminality. • Amato et al (2005) in a review of five meta analyses 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. • In a clinical trial in Bankok, Vanichseni et al (2001) found that patients undergoing methadone maintenance programmes were more likely to complete a 45 day treatment programme than when undergoing detoxification programmes, suggesting they are more able to receive support to aid improvement.	

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/or basic outline of the biological explanation of drug misuse. • Little or no attempt to evaluate drug therapy OR limited attempt to evaluate the biological approach. 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 biological explanation • Limited attempt to evaluate drug therapy OR good evaluation of biological approach. Candidates will produce statements with some development in the form of **mostly accurate** 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 both of the injunctions of the questions **well**. • Good description of the biological approach to explaining drug misuse. Relates to synaptic transmission and

		misuse (e.g., dependency and tolerance), mostly accurate. • Good evaluation of drug therapy including a range of evaluation (eg, ethics, application, comparison, effectiveness, appropriateness, practical implications, research; some of), including one done well. 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 ***both injunctions*** **very well**. • Very good description of the biological explanation of drug misuse with depth of detail concerning the effect of drugs at the level of the synapse. Largely selective. • Very good evaluation that includes a range and more than one well explained evaluation point, of drug therapy largely focused on heroin dependency. Largely focussed on the requirements of the question. 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 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. **TOPIC D: Questions D2(c) and D3 should be marked according to the levels indicated.**	

Question Number	Question	
D1(a)	Explain **one** strength of quantitative data.	
	Answer	Mark
	One mark per point/elaboration. If more than one strength mark all and credit the best (be mindful that one strength may roll naturally into another, which should be credited e.g., numbers so objective, or not subjective so scientific). A weakness of qualitative can be a strength of quantitative, and is creditworthy if described in this way up to **max one** mark overall. • It is easy to analyse as it is numbers rather than narrative/first mark/eq; it can be easily subject to a statistical test to determine significance 2nd mark/eq; • It is not open to interpretation like qualitative data 1st mark/eq;It is objective and therefore more scientific 2nd mark/eq; **Look for other reasonable marking points.**	**(2 AO3)**

Question Number	Question	
D1(b)	Explain why **qualitative** data might be of greater value to sports psychologists than quantitative data. You must refer to sport psychology in your answer.	
	Answer	Mark
	One mark per point/elaboration. Accept responses concerning open-ended questionnaires/interviews as they relate to qualitative data. Max 2 if not related to sport psychology/psychologists at least once in the whole answer. Ignore answers that explain why quantitative is better than qualitative. • It gathers more rich and detailed information to help understand the psychology of sport better than quantitative data/eq; • It allows sports psychologists to understand reasons behind choices which goes deeper than quantitative data/eq; • It allows respondents to respond freely about their sporting preference/ability without constraints of closed ended questions/eq; • It allows sports psychologists to explore topics in greater depth compared to quantitative data/eq; • Subtle information may be achieved that cannot be achieved with preset answers/eq; • It helps *explore* hypotheses in sport psychology that may lead to more experimental research/eq; • It can be gathered via interview which may go some way to avoiding social desirability and demand characteristics compared to preset question on a questionnaire/eq; **Look for other reasonable marking points.**	**(3 AO3)**

Question Number	Question	
D1(c)	A sports psychologists was interested to see if there was a relationship between sporting performance and anxiety. Describe how the sports psychologist might gather and/or analyse correlational data to investigate this relationship between sporting performance and anxiety.	
	Answer	Mark
	One mark per point/elaboration. Marks are available for gathering and/or analysing correlational data. If analysis of questionnaire data (or data from any method that could yield correlation data) which could conceivably be used in a correlation, **max one** mark if not clearly linked to correlation. • They would first gather numerical data on performance and anxiety/eq; • Anxiety could be measured with a closed ended questionnaire and performance as the number of wins/eq; • The results of the questionnaire/number of wins are calculated and quantified into one score for each measure of anxiety and performance/eq; • Each score is ranked for each individual and compared to the scores of other participants/eq; • The scores are placed in a scattergraph to visually detect any link/eq; • 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; • A line of best fit would be used to judge the deviation of points from a trend analysis/eq: • A (Spearman's rho) statistical test is used to find the correlation coefficient/eq; • The coefficient is used to determine the relationship as positive, negative or no correlation/eq; • -1 indicates a perfect negative correlation, 0 indicates no correlation and +1 indicates a perfect positive correlation/eq; • Coefficients between +/-1 but not 0 show some/weak/moderate degree of correlation/eq; • Scattergraphs can be used to uncover curvilinear relationships (as in the inverted U)/eq; **Look for other reasonable marking points.**	**(3 AO3)**

Question Number	Question	
D2(a)	Two physical education teachers, Jim and Sonia, noticed that some students in their classes avoided sports, while others were keen to take part, and some students were better at sports than others. Jim believed that these individual differences were due to personality traits. Sonia, however, disagreed with this biological explanation. Describe **one** explanation that Sonia might use to help understand the individual differences in sporting participation and/or performance in her class. Do not use a biological explanation.	
	Answer	Mark
	One mark per point/elaboration. The focus is on participation and performance, arousal, anxiety, audience. Accept 'motivation' to pursue a sport e.g. achievement motivation, as a theory of performance. Socialisation • The cultures may differ in her class and each culture may view sport as desirable or not/eq; • Family and peers may encourage some students to engage in sport more than others/eq; • Some families may be actively engaged in sport themselves, which normalises and motivates sport in their family/eq; • Sport may be nurtured with positive reinforcement and parental involvement/eq; Reinforcement • Some children may be coached with positive reinforcement such as praise/eq; • Similar to successive approximation, the level of performance must be increased to achieve the same praise/eq; • Extrinsic reinforcers such as trophies can be used to encourage performance/eq; • The sense of achievement felt when performing well is a strong intrinsic reinforcement/eq; Attribution • Some of her classmates might believe the cause of a sporting failure is due to incompetence (internal attribution) so not perform well in sports/believe that a sporting success was due to a refs decision (external attribution) so not perform well in sports/eq; • Some of her classmates might believe they won a race due to good skills (internal attribution) so participate and perform well/believe that a failure in sport was due to poor equipment (external attribution) so not blame themselves and perform well in future sports/eq; • If the cause of a success or failure is in the control of the individual it can determine whether they believe they are responsible for the success or failure and therefore how they participate and perform in the future/eq; • Lack of control and failure can lead to learned helplessness which can affect future performance/eq; **Look for other reasonable marking points.**	**(3 AO1)**

Question Number	Question	
D2(b)	Evaluate the explanation of sporting performance and/or participation you have described in (a).	
	Answer	Mark
	One mark per point/elaboration. **TE** If (a) is blank and (b) correctly evaluates an appropriate and identifiable theory, then full credit can be given. If (b) does not match (a), no credit can be given. If (a) is biological and (b) correctly evaluates the biological explanation then **MAX 2 marks.** Socialisation • Koivula found gender schema associated with certain sports indicating gender socialisation/eq; • It is difficult to prove that socialisation affects performance or participation as there may be biological (trait, skill) differences that make the socialisation more likely to happen/eq; • Most research is correlational, so cause and effect cannot be established/eq; • There are definite cultural norms and values associated with participation in certain types of sport/eq; • Socialisation cannot account for performance directly, some people are just not good at sport despite being brought up around sporting people/eq; Reinforcement • Coaches using positive reinforcement to encourage sporting performance, and the whole sporting world uses prizes and financial incentive to participate and perform well – this suggests reinforcement is considered effective/eq; • Sports personalities commonly cite a sporting hero as an explanation for their success (vicarious reinforcement)/eq; • Despite reinforcement, some people are just not very good at sport so do not excel/eq; • It ignores biological reasons for sporting performance and participation that is better explained by trait theories/eq; **Look for other reasonable marking points.**	**(4 AO2)**

	Guidance	
	Use the levels below to allocate marks according to how detailed the answer is and how thorough the information. Giving marks for elaboration where appropriate is particularly important where questions such as this are suitable to stretch and challenge candidates, so that the full range of marks are available.	

Question Number	Question	
D2(c)	Explain why the personality trait theory that Jim favours might better explain individual differences in sporting participation and/or performance than the explanation you described in (a). You may wish to use research evidence in your answer.	
	Answer	Mark
	Mark according to the levels below. Ignore weaknesses of trait theory/biological theory of participation and/or performance. **0 marks** No rewardable material/explanation of how their explanation is better than the biological explanation. **1 mark answer** Brief and basic reason why the biological explanation is better than another (ai) or weakness(es) of theory described in (ai) without reference to why trait theory is better. e.g., the biological explanation is based on more scientific evidence. **2 mark answer** Good reason why biological explanation is better than another (ai) well outlined OR more than one basic and brief reasons. e.g., the biological explanation is based on more scientific evidence than social explanations as physiological evidence can show reasons why some do well in those sports over others. **3 mark answer** Good reason why the biological explanation is better, well detailed and explained OR more than two brief and basic reasons OR one done well and another briefly/done well e.g., the biological explanation is based on more scientific evidence than social explanations as physiological evidence can show reasons why some do well in those sports, over others. For example Gale (1983) found a higher level of arousal amongst extraverts as measured by EEG linking to why they may participate in sports compared to introverts. Indicative content. • There is scientific physiological evidence that supports a biological explanation of performance. • Gale (1983) found a higher level of arousal amongst extraverts as measured by EEG, physiological evidence not found in other	**(3 AO2)**

	theories. • Extraverts tire more easily as they require greater levels of arousal to stimulate their RAS which is scientific evidence for this theory compared to social theories. • Biological theories are more scientifically testable than social theories.	

Question Number	Question	
D3	The inverted U hypothesis has been useful in understanding sporting performance. Describe and evaluate the inverted U hypothesis. Your evaluation **must** include **at least one** comparison with a different theory of the effect of arousal, anxiety and/or the audience on performance.	
	Indicative content	Mark
	Refer to levels at the end of indicative content Appropriate answers might include the following knowledge, but this list is not exhaustive. Well labelled diagrams can be accepted – see levels **Description** • The inverted U hypothesis is a biological theory that explains sporting performance relating to arousal and anxiety. • Arousal is important in sport as it can improve performance. • An optimum point is reached where peak performance is achieved. • Too much arousal results in a loss of physical performance. • 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. • Fine motor control sports are better performed in a low state of arousal. • Complex sports are best performed in a state of low arousal. • 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	**(12 AO1 / 2)**

	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. • 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 reasonable marking points**	

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	Brief description of the inverted U hypothesis showing a basic understanding of how arousal affects performance. • Description of inverted U hypothesis is attempted/brief/diagram • Little or no attempt at the analytical/evaluation demands of the question. No comparison made. 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. • 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 **mostly accurate** 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	Candidate has attempted and answered ***both injunctions*** **well**. • 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.
Level 4	10-12	Candidate has attempted and answered ***both injunctions*** **very well**. • 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.) • Evaluation includes appropriate strengths / weaknesses discussed accurately, and a clear accurate comparison made. 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 information is present.

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