



A-level PSYCHOLOGY 7182/3

Paper 3 Issues and options in psychology

Mark scheme

June 2023

Version: 1.0 Final



2 3 6 A 7 1 8 2 / 3 / M S

Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts. Alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this mark scheme are available from aqa.org.uk

Copyright information

AQA retains the copyright on all its publications. However, registered schools/colleges for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to schools/colleges to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Copyright © 2023 AQA and its licensors. All rights reserved.

Level of response marking instructions

Level of response mark schemes are broken down into levels, each of which has a descriptor. The descriptor for the level shows the average performance for the level. There are marks in each level.

Before you apply the mark scheme to a student's answer read through the answer and annotate it (as instructed) to show the qualities that are being looked for. You can then apply the mark scheme.

Step 1 Determine a level

Start at the lowest level of the mark scheme and use it as a ladder to see whether the answer meets the descriptor for that level. The descriptor for the level indicates the different qualities that might be seen in the student's answer for that level. If it meets the lowest level then go to the next one and decide if it meets this level, and so on, until you have a match between the level descriptor and the answer. With practice and familiarity you will find that for better answers you will be able to quickly skip through the lower levels of the mark scheme.

When assigning a level you should look at the overall quality of the answer and not look to pick holes in small and specific parts of the answer where the student has not performed quite as well as the rest. If the answer covers different aspects of different levels of the mark scheme you should use a best fit approach for defining the level and then use the variability of the response to help decide the mark within the level, ie if the response is predominantly Level 3 with a small amount of Level 4 material it would be placed in Level 3 but be awarded a mark near the top of the level because of the Level 4 content.

Step 2 Determine a mark

Once you have assigned a level you need to decide on the mark. The descriptors on how to allocate marks can help with this. The exemplar materials used during standardisation will help. Answers in the standardising materials will correspond with the different levels of the mark scheme. These answers will have been awarded a mark by the Lead Examiner. You can compare the student's answer with the standardised examples to determine if it is the same standard, better or worse than the example. You can then use this to allocate a mark for the answer based on the Lead Examiner's mark on the example.

You may well need to read back through the answer as you apply the mark scheme to clarify points and assure yourself that the level and the mark are appropriate.

Indicative content in the mark scheme is provided as a guide for examiners. It is not intended to be exhaustive and you must credit other valid points. Students do not have to cover all of the points mentioned in the indicative content to reach the highest level of the mark scheme.

An answer which contains nothing of relevance to the question must be awarded no marks.

Section A**Issues and debates in psychology**

0 1 What is meant by androcentrism?

[2 marks]

Marks for this question: AO1 = 2

2 marks for clear and coherent knowledge with some elaboration.

1 mark for limited/muddled knowledge.

Possible content:

- male-centred or male-biased view of the world
- male behaviour and masculine traits are judged to be the norm/acceptable/desirable
- female behaviour/feminine traits are judged to be abnormal/less acceptable/less desirable.

Credit alternative valid material.

0 2 Suggest **two** ways in which psychologists could avoid gender bias in their research.

[2 marks]

Marks for this question: AO3 = 2

Award **1 mark** for **each** relevant way up to a maximum of 2 marks.

Possible ways:

- do not extrapolate findings from research with male participants to females **OR** do not extrapolate findings from research with female participants to males
- use both male and female participants in research
- involve both male and female researchers
- do not exaggerate differences between males and females where there are no real differences – avoid alpha bias
- do not minimise or ignore real differences between the behaviour of males and females – avoid beta bias
- be sensitive to male and female norms/standards when designing research/when reporting findings
- take a reflexive approach, ie constantly reflecting on own gender biases when carrying out research.

Credit other relevant suggestions.

0 3 Use your knowledge of determinism to explain Bob's and Mike's comments.

[4 marks]

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Application is clear, appropriate and explicit showing sound understanding of determinism. There is appropriate use of specialist terminology.
1	1–2	Application is limited/muddled showing limited understanding of determinism. The answer lacks detail. Use of specialist terminology is either absent or inappropriate. OR 1 person's comments at L1/2.
	0	No relevant content.

Possible application:

- Both fathers' comments could suggest a deterministic view.
- Bob suggests biological determinism, his daughter's swimming ability is genetic, she has inherited her swimming talent from her grandfather who was a good swimmer.
- Mike suggests environmental determinism, his daughter's early experience/learning/reinforcement history/positive reinforcement/operant conditioning (praise) in swimming lessons has influenced her swimming ability.
- Both fathers' comments suggest hard determinism as they imply the daughters had no free choice/free will – Bob refers to 'destiny' and therefore unavoidable (biology is destiny); Mike says it was 'inevitable' and therefore pre-determined.

Credit other relevant applications.

0 4Discuss levels of explanation in psychology. Refer to **one or more** topics in your answer.**[16 marks]****Marks for this question: AO1 = 6, AO2 = 4, AO3 = 6**

Level	Marks	Description
4	13–16	Knowledge is accurate, generally well detailed and there is explicit reference to levels of explanation. Application to topic(s) is effective. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of levels of explanation is evident but there are occasional inaccuracies/omissions. Discussion/application to topic(s) is mostly effective. The answer is mostly clear and organised but lacks focus on levels of explanation. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of levels of explanation is present. Focus is mainly on description. Any discussion/application to topic(s) is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of levels of explanation is very limited. Discussion/application to topic(s) is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- extreme reductionism (lowest level of explanation) – explaining/studying complex behaviour/experience by breaking it down into smaller component parts
- levels of explanation – basic physiological unit level (low) to more complex holistic level
- reductionism as a hierarchy moving from extreme reductionism of the hard sciences (low-level) through biological level to broader psychological levels (mid-level) and then to sociological level (high-level)
- levels displayed in a diagram
- types of reductionism in relation to levels, eg biological reductionism as the most basic level in psychology; machine reductionism as mid-level in psychology, environmental reductionism as a less extreme form of reductionism
- how each approach exemplifies a level, eg biological approach as the most reductionist level
- holism as the highest level of explanation taking account of all aspects of a person's behaviour/experience – opposite of reductionism.

Possible application to topics:

- conditions such as schizophrenia can be understood at various levels: basic physiological level, eg dopamine action at the synapse versus a social-psychological level, eg family dysfunction and expressed emotion

- cognitive processes like memory can be understood at various levels: basic physiological level, eg action of acetylcholine and role of the hippocampus versus a social-psychological level, eg the effects of social factors in post-event contamination
- obedience can be understood at various levels: basic physiological level, eg the role of nervous system in transmitting and analysing verbal prompts of Milgram's experimenter versus a social-psychological level, eg situational pressure due to being at Yale
- gender can be understood at various levels: basic physiological level, eg XX/XY chromosomes versus a social-psychological level, eg social learning theory explanations.

Possible discussion points:

- basic unit level of reductionism is more appropriate in the hard sciences because methods and traditions involve detailed scientific analysis of discrete units
- basic unit level reductionism leads to clearly defined variables which can be operationalised allowing for inference of cause and effect
- any level of reductionism furthers the aim for psychology's recognition as a science
- usefulness of basic unit level treatments, eg development and use of drugs
- discussion of parsimony – the idea that the simplest level of explanation is the best
- extreme reductionist level leads to loss of meaning – components do not add up to reflect whole experience
- contrasts with holistic level – studying and valuing human experience as a whole; some behaviours can only really be investigated in the holistic context in which they occur
- contrast with the types of investigation preferred by humanistic psychologists, eg case studies, diaries, interviews which yield richer, more detailed information
- discussion of levels of explanation in relation to approaches.

Credit other relevant material.

Section B

Relationships

0 5 What is meant by self-disclosure?

[2 marks]

Marks for this question: AO1 = 2

2 marks for clear and coherent knowledge with some detail.

1 mark for limited/muddled knowledge.

Possible content:

- revealing personal information about the self to another person
- information can be superficial, low-risk/breadth of disclosure, eg work or more intimate, high-risk/depth of disclosure, eg wishes, fears, attitudes and aspirations
- has the general effect of increasing attractiveness and closeness; encourages reciprocal disclosure.

Credit alternative valid material.

0 6 Outline **one** strength **and one** limitation of self-disclosure as an explanation for attraction in romantic relationships.

[6 marks]

Marks for this question: AO3 = 6

For both the strength and the limitation, award marks as follows:

3 marks for a clear, coherent and detailed outline.

2 marks for an outline which lacks some detail.

1 mark for a very limited/muddled outline.

Possible strengths:

- consistent with social penetration theory which suggests that for a relationship to develop partners must keep disclosing further personal information
- use of evidence to support the role of self-disclosure as an explanation, eg correlations between levels of self-disclosure and satisfaction with the relationship
- compatibility with filter theory; self-disclosure enables assessment of similarity of attitudes and complementarity of needs
- supported by evidence which shows that too much, too early can be off-putting to potential partner – acceptability depends on stage of relationship and appropriateness of the content.

Possible limitations:

- contrast with the relative importance of other factors, eg physical attractiveness/equity/social exchange
- cultural limitations; self-disclosure may be less appropriate for romantic relationships in cultures where partners are not allowed free choice; research is often culture specific
- difficult to determine cause and effect, ie whether self-disclosure leads to a stronger relationship or whether having a stronger relationship leads to greater self-disclosure.

Credit other relevant strengths and limitations, including those specific to virtual relationships.

Credit strengths/limitations of evidence upon which explanation is based if explicitly linked to self-disclosure.

0 7 Discuss Duck's phase model of relationship breakdown.

[8 marks]

Marks for this question: AO1 = 3, AO3 = 5

Level	Marks	Description
4	7–8	Knowledge of Duck's model is accurate with some detail. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of Duck's model is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of Duck's model is present. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of Duck's model is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- Duck (1982) described how relationship breakdown occurs in a sequence of four stages/phases
- intra-psychic stage – one partner is dissatisfied, keeps it to self, ruminates
- dyadic stage – problem is raised openly and discussed between partners
- social stage – friends/family are told, time of negotiation, settling of arrangements
- grave dressing stage – post-relationship rationalisation of events and re-building.

Full marks can be achieved by adopted a breadth or depth approach to the number of stages covered in the answer.

Possible discussion:

- use of evidence to support/contradict the stages
- recognises that breakdown is a process rather than a single event
- takes account of the social context in which breakdown of relationships occurs
- grave dressing enables a positive view – a time of reflection for learning and changing
- inadequacy of the original model – Duck added a 5th stage 'resurrection' as a time to look towards future relationships
- useful for counsellors, eg could use cognitive therapy to focus on private thoughts in the intra-psychic stage or suggest focus on practicalities in the social stage
- does not account for the initial dissatisfaction so describes rather than explains

- although Duck proposed a sequence, stages do not always occur in the same order and we can revert to previous stages dependent on communication between partners
- model is largely built on retrospective, self-report evidence
- model is founded on western cultural ideals so has limited application in other cultures.

Credit other relevant material.

0 8 Outline and evaluate the absorption addiction model of parasocial relationships.

[8 marks]

Marks for this question: AO1 = 3, AO3 = 5

Level	Marks	Description
4	7–8	Knowledge of the absorption addiction model is accurate with some detail. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of the absorption addiction model is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of the absorption addiction model is present. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of the absorption addiction model is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- parasocial relationships focused on a celebrity make up for inadequacies/deficiencies/dissatisfaction in a person's life/relationships and give a sense of identity
- absorption – people with weaker personal identity may become totally pre-occupied/consumed with the life of the celebrity and begin to identify with them
- addiction – at the extreme the person seeks ever greater involvement so the parasocial relationship becomes all consuming
- levels of involvement are characterised by McCutcheon & Maltby using the CAS:
 - entertainment social, eg discussion with friends about interesting celebrities
 - intense-personal, eg private obsession/feeling of personal connection
 - borderline pathological, eg uncontrollable/extreme behaviours such as stalking.

Possible evaluation:

- use of evidence to support or contradict the model
- comparison with alternative explanations, eg the attachment explanation
- links between borderline pathological level and poor mental health, social isolation, social incompetence, other addictions
- mediating effects of personality traits such as impulsivity, extraversion and neuroticism, eg people with high level of neuroticism tend to score highly on the intense – personal level aspects of the CAS
- usefulness of measuring instruments such as the CAS – includes distractor items to avoid response bias
- allows for a distinction between pathological and non-pathological parasocial relationships
- evaluation of methods used in this area, eg self-report/correlation and how this might affect our understanding of absorption-addiction.

Credit other relevant material.

Section B**Gender**

0	9
---	---

 What is meant by gender dysphoria?**[2 marks]****Marks for this question: AO1 = 2****2 marks** for clear and coherent knowledge with some detail.**1 mark** for limited/muddled knowledge.**Possible content:**

- where there is an inconsistency/conflict/incongruence between one's assigned gender, on the basis of external sexual characteristics, and the expressed gender or psychological perception of self as male or female
- a person whose biological characteristics are typically male will nevertheless feel female or a person with typically female biological characteristics will nevertheless feel male
- the difference between the expressed gender and the assigned gender is a source of distress – hence reports of being 'trapped inside the wrong body'.

Credit alternative valid material.

1	0
---	---

Outline **one** strength **and one** limitation of biological explanations for gender dysphoria.

[6 marks]

Marks for this question: AO3 = 6

For both the strength and the limitation, award marks as follows:

3 marks for a clear, coherent and detailed outline.

2 marks for an outline which lacks some detail.

1 mark for a very limited/muddled outline.

Possible strengths:

- use of evidence to support biological explanations, eg existence of gender dysphoria in young children; genetic evidence from twin studies (Heylens, 2012); evidence re differences in brain structure – the sexually dimorphic nucleus/BSTc (Zhou, 1995), androgen receptor research (Hare, 2009)
- ethical implications in relation to societal attitudes, eg if something is biological then a person cannot be blamed as they have no choice.

Possible limitations:

- use of evidence for alternative explanations, eg showing that gender dysphoria can be a consequence of childhood trauma or explained via the personal pathway element of gender schema theory
- some evidence shows minimal hormonal differences between people with and without gender dysphoria (Gladue 1985)
- problems with twin evidence – impossible to disentangle genetic and environmental influences
- assuming gender dysphoria is biological implies it is fixed and irreversible but many children grow out of cross-gender identification as they grow older
- issue of determining the cause of biological differences in GD

Credit other relevant strengths and limitations.

1 1

Discuss the effects of media on the development of gender roles.

[8 marks]**Marks for this question: AO1 = 3, AO3 = 5**

Level	Marks	Description
4	7–8	Knowledge of the effects of media on the development of gender roles is accurate with some detail. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of the effects of media on the development of gender roles is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of the effects of media on the development of gender roles is present. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of the effects of media on the development of gender roles is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- media as a source of role models for children
- links with aspects of social learning theory (observation, imitation, modelling, identification, vicarious reinforcement)
- links with cognitive theory, eg gender schema theory suggests that children seek out information that confirms their understanding of their gender so media stereotypes can strengthen gender identity/gender role
- examples of research showing gender stereotypes in various forms of media, eg TV adverts show men in autonomous/authoritative roles and women in domestic roles (Furnham and Farragher, 2000); gender differences in language use on Twitter (Kivran-Swaine, 2013); traditional gender roles in Facebook content (Martine-Aleman and Wartman, 2009); sexualised music videos linked to male attitudes to women (Kisler and Lee, 2010).

Possible discussion:

- use of evidence to support the effects of media on gender development and use of contradictory evidence, eg Stevens Aubrey and Harrison (2004) found limited evidence for traditional gender stereotyping in children's TV programmes
- discussion of alternative explanations for gender role development, eg contrast with biological and psychoanalytic explanations of gender as innate

- media portrayal of gender stereotypes may exaggerate differences between genders and how this affects children's behaviour, eg girls have lower aspirations to traditionally male-dominated careers like science
- how the media can be used to promote/create more positive non-stereotyped ideas about gender
- implications for exposure to media in young children, eg limiting TV time.

Credit other relevant material.

1 2 Outline and evaluate Kohlberg's theory of gender development.

[8 marks]

Marks for this question: AO1 = 3, AO3 = 5

Level	Marks	Description
4	7–8	Knowledge of Kohlberg's theory of gender development is accurate with some detail. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of Kohlberg's theory of gender development is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of Kohlberg's theory of gender development is present. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of Kohlberg's theory of gender development is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- child develops an understanding of gender through a series of stages linked to age
- gender identity – child can label own gender/is aware of self as male/female
- gender stability – child can understand own gender is fixed over time
- gender constancy/consistency – child understands gender is unchanged despite changes in outward appearance/context
- child begins to seek out same sex role models
- understanding of gender is actively constructed through experience and driven by maturation, socialisation, lessening egocentrism.

Possible evaluation:

- use of evidence to support the stages (Slaby and Frey, 1975)
- cross-cultural evidence indicates stages are universal
- explains the cognitive processes rather than just focusing on behaviour
- contradictory evidence, eg preference for same-sex playmates before gender identity stage
- other explanations are more focused on the reasons for development of gender – Kohlberg is better at describing the process
- cannot easily explain why boys show stronger sex-typing than girls.

Credit other relevant material.

Section B**Cognition and development**

1 3 Outline what Piaget meant by conservation.

[2 marks]

Marks for this question: AO1 = 2

2 marks for a clear and coherent outline with some detail.

1 mark for a limited/muddled outline.

- The ability to understand that properties of an object such as mass, volume and number remain constant despite changes in appearance, which arises during the pre-operational stage.

Credit alternative valid outlines and answers embedded in examples.

1 4 Outline **one** strength **and one** limitation of Piaget's research into conservation.

[6 marks]

Marks for this question: AO3 = 6

For both the strength and the limitation, award marks as follows:

3 marks for a clear, coherent and detailed outline.

2 marks for an outline which lacks some detail.

1 mark for a very limited/muddled outline.

Possible strengths:

- innovative method that informed our understanding of cognitive development and paved the way for further research
- carefully constructed and well-documented procedures that lend themselves to replication; how others have replicated the studies
- informed the curriculum by stimulating interest in furthering children's understanding of conservation through the use of specialist play materials, eg water play with measuring cups.

Possible limitations:

- Piaget confused understanding with performance – children may well have understood the post-transformation volume was the same even though they said it was different
- asking the same question twice led children to assume they had given an incorrect answer the first time around – modifications using only one question showed children could conserve earlier than Piaget said
- evidence shows children under 7 years can understand conservation using a more child-friendly approach, eg McGarrigle and Donaldson (1974) naughty teddy research
- limitations of the original sample.

Credit other relevant strengths and limitations.

1 5 Discuss research into violation of expectation.

[8 marks]

Marks for this question: AO1 = 3, AO3 = 5

Level	Marks	Description
4	7–8	Knowledge of research into violation of expectation is accurate with some detail. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of research into violation of expectation is evident but there are occasional inaccuracies/omissions. Discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of research into violation of expectation is present. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of research into violation of expectation is very limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- violation of expectation research involves two stages – the familiarisation stage and the impossible event stage
- familiarisation stage – infants watch a moving apparatus a number of times, eg train moving down a track into a tunnel and out to the other side; a tall and short carrot moving behind a screen; a drawbridge lowering to rest on top of a block. All these events are possible
- impossible event stage – infants watch the same apparatus but this time the event they observe is impossible, eg the train fails to appear on the other side of the tunnel; the tall carrot does not appear in the high window of the screen as it moves behind the screen; the drawbridge appears to pass through the block
- the dependent variable is the time spent looking at the event – preferential looking
- Baillargeon found that infants as young as 2–3 months spent a longer time looking at impossible events than possible events.

Possible discussion:

- adoption of violation of expectation as the standard paradigm used to assess understanding of the physical world
- implications of the findings for theory of object permanence and comparison with Piaget's findings that object permanence arises at about 8 months

- discussion of the validity of the dependent measure used in violation of expectation research – questions about looking at time as a valid measure of surprise and use of surprise to infer object permanence
- physiological evidence seems to support Baillargeon's interpretations – increased neural activity in the right temporal region during the impossible condition (Kaufman 2003)
- argument that looking reflects interest rather than surprise, ie the child notices a difference but does not necessarily understand why there is a difference
- problems of assessing cognitive processing in very young infants, eg level of arousal.

Credit other relevant material.

1 6 Outline and evaluate theory of mind as an explanation for autism.

[8 marks]

Marks for this question: AO1 = 3, AO3 = 5

Level	Marks	Description
4	7–8	Knowledge of theory of mind as an explanation for autism is accurate with some detail. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	5–6	Knowledge of theory of mind as an explanation for autism is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Limited knowledge of theory of mind as an explanation for autism is present. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Knowledge of theory of mind as an explanation for autism is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- theory of mind (Baron-Cohen, 1993) suggests that autism (ASD) is due to problems in cognitive processing
- people with autism (ASD) are said to lack a theory of mind (ToM) which means they may be less likely to understand other people's perspectives
- sometimes referred to as 'mind-blindness' which results in problems understanding social situations and other people's thoughts, intentions, emotions
- lack of ToM is used to account for an array of social deficits that occur with autism, eg limited social interaction, poor communication, lack of pretend play, poor joint attention, lack of gaze and gesture.

Possible evaluation:

- consistent with evidence which demonstrates impaired social functioning, eg Sally-Anne study (Baron-Cohen, 1985); smartie tube test (Perner, 1989); comic strip test (Baron-Cohen, 1986)
- evidence in relation to role of mirror neurons – neurological deficits might explain ToM
- alternative explanations for impaired performance in ToM experiments – impairment may be due to impaired communication or poor memory rather than lack of understanding of other's thoughts
- ToM can explain social deficits seen in people with autism but cannot explain other cognitive characteristics seen in people with autism, eg islets of ability seen in savant cases, central coherence deficits and failure of executive functioning

- ToM might offer a description of cognitive processing deficits but does not inform about the cause – deficits may be the effect rather than the cause
- comparison and compatibility with alternative explanations for autism, eg biological explanations including genetics and neurological deficits.

Credit other relevant material.

Section C**Schizophrenia****1 7**

For each description in **Table 1**, choose a term from **Table 2** which best represents that description. For **each** description, write the correct letter alongside the relevant term in your answer book.

[4 marks]**Marks for this question: AO1 = 4**

Answers:

A – Reliability**B** – Co-morbidity**C** – Validity**D** – Symptom overlap

No credit if more than one letter is attached to a particular term.

- | | |
|---|---|
| 1 | 8 |
|---|---|
- Explain what the researchers could do to eliminate or reduce demand characteristics **and** investigator effects in this study.

[4 marks]

Marks for this question: AO3 = 4

Demand characteristics:

2 marks for a clear and coherent explanation of a way to eliminate or reduce demand characteristics applied to **this study**.

1 mark for a limited/muddled way.

Possible ways:

- not informing the patients which condition they are in (using a single-blind procedure/double-blind procedure), the new drug or the placebo condition
- allowing all patients to believe they are receiving the new drug/deceiving patients in the placebo condition by misleading them into believing they are taking the new drug
- ensuring that patients are not aware of the other condition, eg through careful wording of standardised instructions; making sure patients do not have any contact with patients in the other condition.

Investigator effects:

2 marks for a clear and coherent way to eliminate or reduce investigator effects applied to **this study**.

1 mark for a limited/muddled way.

Possible ways:

- ensure the person administering the drug does not know which patients are taking the new drug and which are taking the placebo (using a double-blind procedure)
- anonymising patients, for example, by assigning them a number so the researcher dealing with patients does not know who is in which condition
- having standardised procedures and conditions so all patients are treated in exactly the same way.

If one strategy only, must be made clear how this strategy reduces/eliminates each bias, for full credit.

Credit other relevant suggestions.

1 9Discuss **one or more** explanations for schizophrenia. Refer to Jay in your answer.**[16 marks]****Marks for this question: AO1 = 6, AO2 = 4, AO3 = 6**

Level	Marks	Description
4	13–16	Knowledge of one or more explanations for schizophrenia is accurate and generally well detailed. Application is effective. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of one or more explanations for schizophrenia is evident but there are occasional inaccuracies/omissions. Application/discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of one or more explanations for schizophrenia is present. Focus is mainly on description. Any application/discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of one or more explanations for schizophrenia is very limited. Application/discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

Biological explanations:

- genetic transmission/genes/DNA – twin studies, concordance, adoption/family studies, gene mapping, candidate genes (eg PCM1 and PPP3CC, interaction between genes NRG1 and NRG3/ERBB4), polygenic effect, relevant chromosomes, eg chromosome 5
- neurotransmitter explanation – dopamine hypothesis, D2 receptors, increased activity in the sub-cortex/ventral tegmental area, reduced dopamine activity in prefrontal area, low levels of dopamine activity in ventral striatum; reduced glutamate activity; raised serotonin in the basal ganglia
- other neural – enlarged ventricles, reduced grey matter, reduced activity in superior temporal gyrus, evidence for damaged brain regions.

Psychological explanations:

- impaired cognitive processing leading to inability to distinguish between own thoughts and external events
- impaired executive functioning and central control, problems in metacognition
- family dysfunction; high expressed emotion; schizophrenogenic mother; double-bind theory; schism and skew.

Possible application:

- Jay's father had mental health problems – suggests Jay might have inherited his condition from his father's side
- Jay's medication reduces symptoms – suggests his neurotransmitter levels/biological make-up as a factor
- Jay's mother worries about him a lot – suggests she might be showing high expressed emotion
- Jay's mother criticises him a lot – suggests double bind as she alternates between concern and irritation
- Jay's speech is confused and he switches from one thing to another – suggests impaired cognitive processing and poor executive functioning/central control.

Possible discussion:

- problems determining cause and effect – altered biology/disturbed family/disturbed cognitive processing may be an effect rather than a cause
- use of evidence to support/counter explanations and problems with evidence, eg twin studies, family research
- implications for treatments – biological explanations suggest drug treatments, family based explanations suggest family therapy
- comparison of different explanations
- determinism – biological/environmental determinism which could lead to negative attitudes and affect treatment expectations/outcomes
- reductionism – biological explanations are based on more traditionally objective research and might be assumed to have greater scientific worth
- discussion in relation to other debates, eg nature-nurture.

Credit other relevant material.

Section C**Eating behaviour**

2	0
----------	----------

For each description in **Table 3**, choose a term from **Table 4** which best represents that description. For **each** description, write the correct letter alongside the relevant term in your answer book.

[4 marks]**Marks for this question: AO1 = 4**

Answers:

A – Neophobia**B** – Restraint**C** – Disinhibition**D** – Taste aversion

No credit if more than one letter is attached to a particular term.

- | | |
|---|---|
| 2 | 1 |
|---|---|
- Explain what the researchers could do to eliminate or reduce demand characteristics
- and**
- investigator effects in this study.

[4 marks]**Marks for this question: AO3 = 4****Demand characteristics**

2 marks for a clear and coherent explanation of a way to eliminate or reduce demand characteristics applied to **this study**.

1 mark for a limited/muddled way.

Possible ways:

- not informing the patients which condition they are in (using a single-blind procedure/double-blind procedure), the new drug or the placebo condition
- allowing all patients to believe they are receiving the new drug/deceiving patients in the placebo condition by misleading them into believing they are taking the new drug
- ensuring that patients are not aware of the other condition, eg through careful wording of standardised instructions; making sure patients do not have any contact with patients in the other condition.

Investigator effects

2 marks for a clear and coherent way to eliminate or reduce investigator effects applied to **this study**.

1 mark for a limited/muddled way.

Possible ways:

- ensure the person administering the drug does not know which patients are taking the new drug and which are taking the placebo (using a double-blind procedure)
- anonymising patients, for example, by assigning them a number so the researcher dealing with patients does not know who is in which condition
- having standardised procedures and conditions so all patients are treated in exactly the same way.

If one strategy only, must be made clear how this strategy reduces/eliminates each bias, for full credit

Credit other relevant suggestions.

2 2Discuss **one or more** explanations for anorexia nervosa. Refer to Elliot in your answer.**[16 marks]****Marks for this question: AO1 = 6, AO2 = 4, AO3 = 6**

Level	Marks	Description
4	13–16	Knowledge of one or more explanation(s) is accurate and generally well detailed. Application is effective. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of one or more explanation(s) is evident but there are occasional inaccuracies/omissions. Application/discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of one or more explanation(s) is present. Focus is mainly on description. Any application/discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of one or more explanation(s) is very limited. Application/discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

Biological explanations:

- genetic transmission – heritable through transmission of DNA/genes; familial link; twin studies/family studies/concordance rates/genome studies; polygenic; candidate genes, eg OPRD1, HTR1D, EPHX2
- reduced serotonin activity as demonstrated in lower levels of 5-HIAA in urine
- role of dopamine controversial – levels can be lower/higher/same as controls: increased dopamine in AN as demonstrated by higher levels of homovanillic acid; recovering AN patients have increased D2 activity
- other transmitters – noradrenaline and GABA
- low levels of leptin which controls satiety
- biological correlates – AN associated with birth complications and premature birth, poor maternal nutrition, season of birth, dysfunctional neural circuitry in the insula region.

Psychological explanations:

- family systems theory – high levels of control, overprotectiveness, rigidity, conflict avoidance, enmeshment – inhibition of individuality and autonomy
- social learning theory – modelling, reinforcement, media influences, identification, vicarious reinforcement
- cognitive explanations – cognitive distortions, eg distortions of body image, irrational beliefs.

Possible application:

- Elliot believes he is fatter... suggests a cognitive distortion. Elliot checks himself in the mirror – he might perceive himself as bigger (distorted self-perception)
- Elliot compares himself to actors on TV... suggests social learning, imitation, identification
- Elliott arranges/counts food... suggests an irrational obsession with food
- Elliot's mother once had eating problems... suggests genetic component, familial linkage
- Elliot's mother watches over him, tells him what to do... suggests control, overprotectiveness, lack of autonomy, enmeshment
- Elliot's medication seems to work... suggesting the problem may be neurochemical/biological.

Possible discussion:

- use of evidence to support/counter explanations and problems with evidence, eg twin studies; family research
- implications for treatments – biological explanations suggest drug treatments, family-based explanations suggest family therapy
- ability to explain cultural/gender/temporal differences in incidence
- comparison of different explanations
- problems determining cause and effect – altered biology/disturbed family/disturbed cognitive processing may be an effect rather than a cause
- determinism – biological/family explanations suggest either biological/environmental determinism which could lead to negative attitudes and affect treatment expectations/outcomes
- reductionism – biological explanations are based on more traditionally objective research and might be assumed to have greater scientific worth v family-based explanations which rely on less scientific methodology, eg case histories
- discussion in relation to other debates, eg nature-nurture
- ethical implications, eg is the person responsible for their condition, or the family?

Credit other relevant material.

Section C**Stress**

2 3 For each description in **Table 5**, choose a term from **Table 6** which best represents that description. For **each** description, write the correct letter alongside the relevant term in your answer book.

[4 marks]

Marks for this question: AO1 = 4

Answers:

A – Challenge

B – Hardiness

C – Commitment

D – Control

No credit if more than one letter is attached to a particular term.

- | | |
|---|---|
| 2 | 4 |
|---|---|
- Explain what the researchers could do to eliminate or reduce demand characteristics
- and**
- investigator effects in this study.

[4 marks]**Marks for this question: AO3 = 4****Demand characteristics**

2 marks for a clear and coherent explanation of a way to eliminate or reduce demand characteristics applied to **this study**.

1 mark for a limited/muddled way.

Possible ways:

- not informing the patients which condition they are in (using a single-blind procedure/double-blind procedure), the new drug or the placebo condition
- allowing all patients to believe they are receiving the new drug/deceiving patients in the placebo condition by misleading them into believing they are taking the new drug
- ensuring that patients are not aware of the other condition, eg through careful wording of standardised instructions; making sure patients do not have any contact with patients in the other condition.

Investigator effects

2 marks for a clear and coherent way to eliminate or reduce investigator effects applied to **this study**.

1 mark for a limited/muddled way.

Possible ways:

- ensure the person administering the drug does not know which patients are taking the new drug and which are taking the placebo (using a double-blind procedure)
- anonymising patients, for example, by assigning them a number so the researcher dealing with patients does not know who is in which condition
- having standardised procedures and conditions so all patients are treated in exactly the same way.

If one strategy only, must be made clear how this strategy reduces/eliminates each bias, for full credit.

Credit other relevant suggestions.

- 2 5** Discuss what psychologists have found out about workplace stress. Refer to Carrie in your answer.

[16 marks]

Marks for this question: AO1 = 6, AO2 = 4, AO3 = 6

Level	Marks	Description
4	13–16	Knowledge of what psychologists have found out about workplace stress is accurate and generally well detailed. Application is effective. Discussion is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively.
3	9–12	Knowledge of what psychologists have found out about workplace stress is evident but there are occasional inaccuracies/omissions. Application/discussion is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	5–8	Limited knowledge of what psychologists have found out about workplace stress is present. Focus is mainly on description. Any application/discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of what psychologists have found out about workplace stress is very limited. Application/discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- the job-demands resources model (Karasek, 1979) – levels of control can offset the negative effects of excess workload
- workload – too much/not enough work to do as a source of stress. Evidence excess workload is related to raised chronic physiological arousal and raised levels of stress hormones (Johansson, 1978) and stress-related illness such as CHD (Kivimaki, 2006)
- control – the level of control a worker has over the workload (degree of latitude) affects stress; high control = low stress; low control = high stress. Low control linked to CHD (Marmot, 1997)
- further effects of combined excess workload and lack of control: dissatisfaction, depression, psychosomatic illness, burnout
- Job Content Questionnaire (Karasek, 1985) as used to assess job stressors.

Possible application:

- Carrie is suffering the physiological effects of stress – lack of sleep, heart pounding
- Carrie does not have any control over the speed at which she has to work – packages come along a conveyor belt... or any control over the physical environment (noise)
- Carrie is not managing to meet her targets... suggests targets are unrealistic and therefore workload is too high

- factory workers want to arrange a meeting... suggests they are trying to exert some control over their working conditions
- the workers want to discuss work-related illness... suggests some workers are experiencing negative health effects of excess workload and low control.

Possible discussion:

- use of evidence to discuss the effects of workplace stress
- discussion of other key factors affecting stress – physical environment, eg excess temperature, noise, personal space; organisational factors, eg opportunities for change, involvement in decision-making; co-workers; home-work interface – ability to cope with competing demands of work and home life, eg childcare
- evidence tends to be correlational as research takes place in the field where extraneous variables cannot be controlled
- relationship between aspects of control and the stressful effect of daily hassles
- perceived levels of control may have the same effect as actual levels of control
- mediating variables include personality type (Type As respond less well to stress), whereas hardiness enables workers to cope with the challenge of higher workload and they have an inbuilt feeling of being in control
- implications for employers and managers – giving workers some control over their workplace can be good for employee health and reduce absenteeism.

Credit other relevant material.

Section D**Aggression**

- 2 6** Referring to information about the study, explain **two other** reasons why it was appropriate to use a Chi-Squared test in this case.

[4 marks]**Marks for this question: AO2 = 4**Award **1 mark** for **each** of the following points:

- each player's performance is classified into one of two categories (high or low aggression)
- the data is therefore nominal/categorical
- the researcher is investigating a difference in aggression levels
- between the violent film/primed group and the neutral film/unprimed group.

OR (alternatives for bullets 3 and 4)

- the researcher is investigating an association between two variables
- ie type of film seen beforehand and aggression level.

No credit for answers based on type of design as this is ruled out in the question.

- 2 7** Using your knowledge of research into cognitive priming, explain the likely outcome of the study.

[4 marks]**Marks for this question: AO2 = 2, AO3 = 2**

Level	Marks	Description
2	3–4	Application of cognitive priming is clear and accurate. Explanation of the likely outcome is clear, coherent and appropriate.
1	1–2	Application is limited or muddled. Explanation is limited or inappropriate.
	0	No relevant content.

Possible content:

- the likely outcome is that more of the participants who watch the violent film beforehand will be classified in the high aggression category than the low aggression category and more of the participants who watch the neutral film beforehand will be classified in the low aggression category than the high aggression category
- cognitive priming would explain this because it suggests that exposure to aggressive images acts as a script for how to behave aggressively; the script is stored in memory then triggered when a similar, subsequent aggressive situation occurs.

2 8

Explain **one** way in which the experiment could be changed to control for the problem of using different participants in each condition.

[4 marks]**Marks for this question: AO3 = 4**

Level	Marks	Description
2	3–4	Explanation is clear, coherent and appropriate with some detail. Answer shows sound understanding of how to control for the problem. There is effective use of specialist terminology.
1	1–2	Explanation is limited/muddled. Answer shows some limited understanding and/or detail is lacking. Specialist terminology is inappropriately used or absent.
	0	No relevant content.

Possible ways:

- use a matching pairs design where, for each person in one condition, there is a person in the other condition who has similar characteristics so each member of a pair acts as control for the other – one relevant variable here would be history of viewing violent films
- use a repeated measures design where each participant completes both conditions so there are no participant variables/individual differences because each person is compared with him/her self; (the order in which the two conditions are completed would have to be counterbalanced to control for order effects)
- random allocation to conditions as a way of mitigating the effects of relevant variables like past film viewing history, experience of computer game playing, level of aggression, gender; assign each participant a number then use a random number generator to decide who goes in which condition.

Credit other relevant ways.

2 9

Describe how de-individuation is involved in aggression.

[6 marks]**Marks for this question: AO1 = 6**

Level	Marks	Description
3	5–6	Knowledge of how de-individuation is involved in aggression is detailed and appropriate. The answer is clear and coherent. Specialist terminology is used effectively.
2	3–4	Knowledge of how de-individuation is involved in aggression is mostly appropriate but lacks detail and/or clarity in places. There is some appropriate use of specialist terminology
1	1–2	Knowledge of how de-individuation is involved in aggression is limited/very limited. The answer lacks clarity. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- loss of personal identity in a group situation leads to disregard for social norms and increased aggression
- sense of autonomy and personal responsibility for own actions is diminished – instead the individual is governed by the norms and expectations of the group
- inhibitions that normally regulate an individual's behaviour are reduced – there is a reduction in private self-awareness
- social identity model of de-individuation (Reicher, 1987) explains how some private situations also lead to de-individuation, eg the Internet which allows for anonymity
- knowledge of studies involving the effect of de-individuation on aggression, eg Zimbardo (1969).

Credit other relevant material.

3 0 Evaluate the role of de-individuation in aggression.

[6 marks]

Marks for this question: AO3 = 6

Level	Marks	Description
3	5–6	Evaluation of the role of de-individuation in aggression is detailed and effective. The answer is clear and coherent. Specialist terminology is used effectively.
2	3–4	Evaluation of the role of de-individuation in aggression is mostly effective but lacks detail and/or clarity in places. There is some appropriate use of specialist terminology
1	1–2	Evaluation of the role of de-individuation in aggression is limited/very limited. The answer lacks clarity. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible evaluation:

- use of evidence supporting or contradicting the explanation
- de-individuation/anonymity do not always lead to aggression – it depends on the norms of the group which may be antisocial or prosocial
- consideration of the role of anonymity – anonymity of a victim may be as important as anonymity of the aggressor
- implications for dealing with aggression, eg reduction in situational factors that contribute to de-individuation in order to promote personal responsibility and reduce aggressive behaviour
- comparison with alternative explanations.

Credit other relevant material.

Section D

Forensic psychology

- 3 1** Referring to information about the study, explain **two other** reasons why it was appropriate to use a Chi-Squared test in this case.

[4 marks]

Marks for this question: AO2 = 4

Award **1 mark** for **each** of the following points:

- each profiler's performance is classified into one of two categories (high or low accuracy)
- the data is therefore nominal/categorical
- the researcher is investigating a difference in profiling accuracy level
- between the murder case group and the robbery group.

OR (alternatives for bullets 3 and 4)

- the researcher is investigating an association between two variables
- ie type of crime and level of profiling accuracy.

No credit for answers based on type of design as this is ruled out in the question.

- 3 2** Using your knowledge of the top-down approach to offender profiling, explain the likely outcome of the study.

[4 marks]

Marks for this question: AO2 = 2, AO3 = 2

Level	Marks	Description
2	3–4	Application of the top-down approach to offender profiling is clear and accurate. Explanation of the likely outcome is clear, coherent and appropriate.
1	1–2	Application is limited or muddled. Explanation is limited or inappropriate.
	0	No relevant content.

Possible content:

- the likely outcome is that more of the participants who profile the murder case will be categorised in the high accuracy category than the low accuracy category and more of the participants who profile the robbery case will be categorised in the low accuracy category than the high accuracy category
- the top-down approach would explain this because it has been found to be more useful for serious cases, such as murder, where the crime scene reveals specific personal details about the person committing the crime than for more common property-based crimes such as robbery.

Full credit can be awarded for answers predicting no difference in accuracy of profile between the conditions, as a growing body of evidence suggests the top-down approach can be effective when profiling non-violent crimes eg Meketa (2017)

Credit other relevant material.

- 3 3** Explain **one** way in which the experiment could be changed to control for the problem of using different participants in each condition.

[4 marks]

Marks for this question: AO3 = 4

Level	Marks	Description
2	3–4	Explanation is clear, coherent and appropriate with some detail. Answer shows sound understanding of how to control for the problem. There is effective use of specialist terminology.
1	1–2	Explanation is limited/muddled. Answer shows some limited understanding and/or detail is lacking. Specialist terminology is inappropriately used or absent.
	0	No relevant content.

Possible ways:

- use a matching pairs design where, for each person in one condition, there is a person in the other condition who has similar characteristics so each member of a pair acts as control for the other – one relevant variable would be number of years' profiling experience
- use a repeated measures design where each profiler completes both profiles so there are no participant variables/individual differences because each person is compared with him/herself; (the order in which the two conditions are completed would have to be counterbalanced to control for order effects)
- random allocation to conditions as a way of mitigating the effects of relevant variables like past profiling history, age, occupational background; assign each participant a number then use a random number generator to decide who goes in which condition.

Credit other relevant ways.

3 4 Describe how cognitive distortions might be involved in offending behaviour.

[6 marks]

Marks for this question: AO1 = 6

Level	Marks	Description
3	5–6	Knowledge of how cognitive distortions might be involved in offending behaviour is detailed and appropriate. The answer is clear and coherent. Specialist terminology is used effectively.
2	3–4	Knowledge of how cognitive distortions might be involved in offending behaviour is mostly appropriate but lacks detail and/or clarity in places. There is some appropriate use of specialist terminology
1	1–2	Knowledge of how cognitive distortions might be involved in offending behaviour is limited/very limited. The answer lacks clarity. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- an offender's biased/dysfunctional thinking about their offence serves to legitimise behaviour and maintain a positive view of the self
- hostile attribution bias suggests offenders misinterpret social cues and justify their actions to themselves by attributing cause to the victim, eg an unprovoked act is justified on the grounds that the victim did something to initiate the violence
- minimalisation (minimisation) – offenders justify offence to themselves by playing down the significance of their act, eg suggesting injuries inflicted in a vicious assault were mild. This bias acts to reduce an offender's feeling of guilt
- other forms of cognitive distortion seen in offenders, eg belief in a just world leading to victim blaming.

Credit other relevant material.

3 5 Evaluate the role of cognitive distortions in offending.

[6 marks]

Marks for this question: AO3 = 6

Level	Marks	Description
3	5–6	Evaluation of the role of cognitive distortions in offending is detailed and effective. The answer is clear and coherent. Specialist terminology is used effectively.
2	3–4	Evaluation of the role of cognitive distortions in offending is mostly effective but lacks detail and/or clarity in places. There is some appropriate use of specialist terminology
1	1–2	Evaluation of the role of cognitive distortions in offending is limited/very limited. The answer lacks clarity. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible evaluation:

- use of evidence to support/contradict the existence of cognitive distortions in offenders
- hostile attribution bias can explain reactive aggressive behaviour better than pre-meditated and planned aggression
- most research relies on use of hypothetical stories/vignettes to determine likely response – this is unlike real aggression in a real-life situation
- cognitive explanations, eg minimalisation can describe how an offender rationalises/interprets his/her actions but does not necessarily explain the initial cause of the offending
- relative importance of cognitive distortion in relation to other explanations for aggression
- implications for dealing with offending – changing cognitive appraisal might lead to successful rehabilitation.

Credit other relevant material.

Section D**Addiction**

- 3 6** Referring to information about the study, explain **two other** reasons why it was appropriate to use a Chi-Squared test in this case.

[4 marks]**Marks for this question: AO2 = 4**Award **1 mark** for **each** of the following points:

- each participant's bet in the test game is classified into one of two categories (high stakes, low stakes)
- the data is therefore nominal/categorical
- the researcher is investigating a difference in bet value/stakes in the test game
- between the reinforcement group and the no reinforcement group.

OR (alternatives for bullets 3 and 4)

- the researcher is investigating an association between two variables
- ie whether or not gambling is reinforced and the bet value/stakes in the test game.

No credit for answers based on type of design as this is ruled out in the question.

- 3 7** Using your knowledge of learning theory as applied to gambling, explain the likely outcome of the study.

[4 marks]**Marks for this question: AO2 = 2, AO3 = 2**

Level	Marks	Description
2	3–4	Application of learning theory to gambling is clear and accurate. Explanation of the likely outcome is clear, coherent and appropriate.
1	1–2	Application is limited or muddled. Explanation is limited or inappropriate.
	0	No relevant content.

Possible content:

- the likely outcome is that more of the participants who won 5 practice games (partial reinforcement/variable interval condition) will be categorised in the high stakes category than the low stakes category and more of the participants who won no practice games (no reinforcement condition) will be categorised in the low stakes category than the high stakes category
- learning theory would explain this outcome through operant conditioning – formation of an association between response and consequence leading to repetition of behaviour and wins as positive reinforcement for betting behaviour which is strengthened through repeated association.

Credit other relevant material.

- 3 8** Explain **one** way in which the experiment could be changed to control for the problem of using different participants in each condition.

[4 marks]

Marks for this question: AO3 = 4

Level	Marks	Description
2	3–4	Explanation is clear, coherent and appropriate with some detail. Answer shows sound understanding of how to control for the problem. There is effective use of specialist terminology.
1	1–2	Explanation is limited/muddled. Answer shows some limited understanding and/or detail is lacking. Specialist terminology is inappropriately used or absent.
	0	No relevant content.

Possible ways:

- use a matching pairs design where, for each person in one condition, there is a person in the other condition who has similar characteristics so each member of a pair acts as control for the other – one relevant variable would be gambling history
- use a repeated measures design where each person takes part in both conditions so there are no participant variables/individual differences because each person is compared with him/her self, (in which case the order of completing the two conditions would have to be counterbalanced to control for order effects)
- random allocation to conditions as a way of mitigating the effects of relevant variables like past gambling history, age, other addictive conditions; assign each participant a number then use a random number generator to decide who goes in which condition.

Credit other relevant ways.

3 9 Describe cue reactivity as an explanation for nicotine addiction.

[6 marks]

Marks for this question: AO1 = 6

Level	Marks	Description
3	5–6	Knowledge of cue reactivity as an explanation for nicotine addiction is detailed and appropriate. The answer is clear and coherent. Specialist terminology is used effectively.
2	3–4	Knowledge of cue reactivity as an explanation for nicotine addiction is mostly appropriate but lacks detail and/or clarity in places. There is some appropriate use of specialist terminology
1	1–2	Knowledge of cue reactivity as an explanation for nicotine addiction is limited/very limited. The answer lacks clarity. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- smoking behaviour is associated with environmental stimuli (exposure to cues), eg being with friends in a bar, relaxing on the sofa after a meal, holding a drink whilst smoking, rituals associated with smoking/lighting a cigarette
- based on the notion of classical conditioning where learning takes place by association between unconditioned stimulus (cigarette) and neutral stimulus (environmental cues)
- cues associated with smoking behaviour become the conditioned stimuli that trigger craving
- smoking continues because of negative reinforcement provided by the removal of craving/the rewarding/satisfying effect it elicits (operant conditioning).

Credit other relevant material.

4 0

Evaluate cue reactivity as an explanation for nicotine addiction.

[6 marks]**Marks for this question: AO3 = 6**

Level	Marks	Description
3	5–6	Evaluation of cue reactivity as an explanation for nicotine addiction is detailed and effective. The answer is clear and coherent. Specialist terminology is used effectively.
2	3–4	Evaluation of cue reactivity as an explanation for nicotine addiction is mostly effective but lacks detail and/or clarity in places. There is some appropriate use of specialist terminology
1	1–2	Evaluation of cue reactivity as an explanation for nicotine addiction is limited/very limited. The answer lacks clarity. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible evaluation:

- use of evidence to support/contradict the explanation, eg evidence that smoking associated/ritual cues can elicit craving
- better explains maintenance of smoking behaviour rather than initiation
- usefulness in relation to alternative explanations, eg social learning theory
- links with biological explanation – cue reactivity explanation is consistent with neural basis for classical conditioning through reward pathways
- role of self-efficacy in mediating the effects of cues
- implications for therapy and relapse, eg devising treatments that take account of cue reactivity such as avoiding situations where precipitating cues might occur.

Credit other relevant material.

Assessment Objective Grid				
Issues and debates	AO1	AO2	AO3	Total
01	2			2
02			2 (RM, Str 2)	2
03		4		4
04	6	4	6	16
Total	8	8	8	24
AND				
Relationships				
Gender				
Cognition and dev				
05/09/13	2			2
06/10/14			6	6
07/11/15	3		5	8
08/12/16	3		5	8
Total	8		16	24
AND				
Schizophrenia				
Eating				
Stress				
17/20/23	4			4
18/21/24			4 (Str 2, RM Maths)	4
19/22/25	6	4	6	16
Total	10	4	10	24
AND				
Aggression				
Forensic				
Addiction				
26/31/36		4 (RM, Maths)		4
27/32/37		2	2	4
28/33/38			4 (RM, Maths)	4
29/34/39	6			6
30/35/40			6	6
Total	6	6	12	24
Paper Totals	32	18	46	96

RM Total = 14

Maths Total = 12

AO3 Strand 2 Total = 10