
Student responses with examiner commentary

A-level Psychology 7182/3 (Specimen Material Second Set)
Paper 3 Issues and Options in Psychology

[First teaching: September 2015]

[First Examination: Summer 2017]

Introduction

These resources should be used in conjunction with the Specimen Assessment Material 7182/3 (second set) from the AQA website. This document illustrates how examiners intend to apply the mark scheme in live papers. The question papers will be marked using a levels of response mark scheme. These answers and the accompanying commentaries have been produced to help you understand what is required to achieve the different levels and how the mark scheme is to be interpreted. These principles of marking apply across all papers.

While every attempt has been made to show a range of student responses, the following responses, and examiner comments provide teachers with the best opportunity to understand the application of the mark scheme. Responses have not been produced for every question but rather cover a variety of different types of questions and topic areas.

*Please note that the students' responses have been typed exactly as they were written.

QUESTION

02.1 With reference to the item above, explain what is meant by 'determinism'. Refer to **three** types of determinism in your answer.

[6 marks]

MARK SCHEME

Marks for this question: AO2 = 6

Level	Marks	Description
3	5–6	There is accurate and detailed knowledge of determinism with appropriate reference to three different types of determinism. Most of the application to the stem is clear and effective. The answer is coherent and well organised with effective use of specialist terminology.
2	3–4	There is some relevant knowledge of determinism and types of determinism and some appropriate application to the stem. The answer is mostly clear and organised, with appropriate use of specialist terminology.
1	1–2	Knowledge of determinism and/or types of determinism is muddled but can be inferred. Application is limited/absent. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Content and application:

- determinism – understanding that behaviour is controlled and we do not exercise free will over our own behaviour
- biological determinism – behaviour is controlled by aspects of biology eg genes, chemicals etc – depression 'runs in families' implies biological determinism
- environmental determinism – behaviour is controlled by external influences eg parents, society etc – 'serious social problems' implies environmental determinism
- psychic determinism – behaviour is controlled by unconscious fears, desires etc – 'experienced traumatic events in the past' implies psychic determinism

Credit also appropriate references to hard and soft determinism

Exemplar response

Determinism is the view that all behaviour is controlled by internal/external forces and not by the individual ie the individual has no free will.

In the article it states that 'depression runs in families' which can refer to biological determinism. This means behaviour is controlled by internal processes such as genes. However if it is seen to run in families it could also be an example of environmental determinism because external events in the environment such as the family may determine behaviour particularly as the text refers to 'serious social problems'.

Psychic determinism is ?

Examiner commentary

This is a Level 2 response. There is relevant knowledge of two types of determinism and some appropriate application to the stem. The answer is mostly clear and organised, with appropriate use of specialist terminology.

Mark awarded = 4

QUESTION

02.2 With reference to the item above, identify **one** influence of nature on our behaviour and **one** influence of nurture on our behaviour.

[2 marks]

MARK SCHEME

Marks for this question: AO2 = 2

1 mark – nature is indicated by reference to genetic inheritance ‘runs in families’

Plus

1 mark – nurture is indicated by reference to environment or experience ‘serious social problems’, ‘traumatic events in the past’.

Exemplar response

Nurture – genetic – ‘runs in the family’.
Nature – environment – ‘serious social problems’.

Examiner commentary

Unfortunately, the two terms are transposed and therefore this response cannot access the marks.

Mark awarded = 0

QUESTION

03.1 The study on the opposite page is an example of socially sensitive research.

Briefly explain how the researchers could have dealt with the issue of social sensitivity in this study.

[4 marks]

MARK SCHEME

Marks for this question: AO3 = 4

Level	Marks	Description
2	3–4	Clear understanding of the notion of social sensitivity is demonstrated through effective application to the stem. Explanation of how the researchers could have dealt with the issue of social sensitivity in this case is clear. The answer is generally coherent with effective use of terminology.
1	1–2	Some understanding of the notion of social sensitivity is demonstrated through limited application to the stem. There is limited/partial explanation of how the researchers could deal with the issue of social sensitivity in this case. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Content:

- Awareness of issue: Researchers should be aware of the implications of their research: possible negative impact for the children in the sample; possible negative implications of the research for the reputation of Crayford school and the wider community; possible self-fulfilling prophecy
- Dealing with the issue: Researchers should take adequate steps to counter the above: sensitive briefing/debriefing of participants, parents, teachers etc; care in relation to publication, disclosure of results and confidentiality/anonymity.

Exemplar response

Because of the nature of the research – looking at a possible link between antisocial behaviour and the social background of 14 year old children – the researchers should realise the sensitive nature of the research and even before the research was carried out they should have taken care to inform the parents and emphasise confidentiality etc throughout. As the data was classified following interviews it may not be replicable/objective etc.

Examiner commentary

This is a Level 1 response. The answer shows some understanding of the sensitive nature of the research but there are important omissions. For example, there is no reference to the findings and the implications to Crayford School. There is limited application to the important points in the stem. There is only a very limited explanation of how the researchers could deal with the issue of social sensitivity in this case. The answer lacks detail and contains irrelevant material (e.g. the final sentence). There is limited use of specialist terminology.

Mark awarded = 1

QUESTION

03.2 What level of measurement is being used in this study?

[1 mark]

MARK SCHEME

Marks for this question: AO2 = 1

1 mark for nominal level/categorical level

Exemplar response

Nominal

Examiner commentary

Mark awarded = 1

QUESTION

03.3 Explain **one** limitation of the level of measurement you have identified in your answer to 03.2.
[2 marks]

MARK SCHEME

Marks for this question: AO3 = 2

1 mark – categorical data is crude/unsophisticated/does not enable very sensitive analysis

Plus

1 mark – because it does not yield a numerical result for each participant

Exemplar response

The data collected was only classified into a category and this limits the type of analysis that can be carried out on the data.

Examiner commentary

This response would gain a mark for the limitation of analysis but the answer is brief and does not refer to the benefit of a numerical result for each participant.

Mark awarded = 1

QUESTION

04 Outline and evaluate reductionist explanations in psychology.

[8 marks]

MARK SCHEME

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

Level	Marks	Description
4	7–8	Outline of reductionist explanations is accurate and generally well detailed. Evaluation is effective, with some balance. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	5–6	Outline of reductionist explanations is evident. There are occasional inaccuracies. There is some effective evaluation. The answer is mostly clear, organised and focused. Specialist terminology mostly used effectively.
2	3–4	Outline of reductionist explanations is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy, organisation and focus in places. Specialist terminology used inappropriately on occasions.
1	1–2	Outline of reductionist explanations is limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible content:

- Reductionism – explaining a phenomenon in terms of constituent parts
- Studying underlying elements
- Description linked to approaches eg biopsychologists analyse brain chemicals, neurons; cognitive psychologists analyse components of models eg models of memory

Possible evaluation:

- Parsimonious thus economical

- Consistent with approach used in other sciences
- Enables a more concrete understanding
- Focus on elements enables greater testability
- Misses complexity of many behaviours
- Fails to take account of context of behaviour
- Contrast with holistic approach

Answers that focus on a particular approach that is reductionist can gain full credit as long as the focus is on the issue of reductionism.

Credit other relevant information.

Exemplar response

Reductionism is when human behaviour is reduced to an explanation of simple component parts. It is the opposite to 'holism' which is investigating the whole person. For example, reductionists would say a complex human behaviour like schizophrenia might be reduced down and explained with respect to a chemical imbalance in the brain eg associated with dopamine.

Reductionism is considered parsimonious as it explains behaviour in a very simple and way. This is considered a strength as it is a scientific approach to studying behaviour. Because behaviour is broken down into smaller parts (eg the Behaviourists explain behaviour with regard to S-R links) the simpler component can be easily tested scientifically and theories can be falsified. Some consider this a strength of reductionist explanations.

However, others would argue that by breaking down complex human behaviour into such simple component parts, complex interactions can be lost or ignored, not really explaining the complexity of human behaviour. For example, if schizophrenia is explained in terms of neurotransmitters, this ignores important social and environmental factors that might be influencing the behaviour.

Although reductionism links psychology to science and other scientific explanations eg biology, and simplifies behaviour, it may not be appropriate for explaining complex human phenomena. Human behaviour occurs in the context of a particular family/social group/culture etc and reductionist explanations ignore these important influences. Many would argue that reductionist explanations alone are insufficient to explain many complex human behaviours.

Examiner commentary

This is a Level 4 response. Given the limited time available this is a very detailed answer which makes effective use of both approaches (Behaviourism) and topics (Schizophrenia) to illustrate points. The outline of reductionism is accurate and the evaluation is effective, with some balance. The answer is clear, coherent and focused. Specialist terminology is used effectively. There are occasional minor errors (e.g. 'parsimonious') but this does not deter from the points being made.

Mark awarded = 8

QUESTION

Topic: Cognition and Development

11 Briefly outline theory of mind as an explanation for autism.

[2 marks]

MARK SCHEME

Marks for this question: AO1 = 2

1 mark – autism results from very specific form of impaired cognitive functioning or mindblindness

Plus

1 mark – lacking a theory of mind means people with autism cannot understand/appreciate the mental states of others

Exemplar response

Autistic children cannot guess what other people are thinking - they lack a theory of mind.

Examiner commentary

There is a hint in this response that people with autism 'lack an understanding of the mental states of others', however the answer is too vague and the use of the word 'guess' is misleading.

Mark awarded = 0

QUESTION

12 Explain **two** limitations of theory of mind as an explanation for autism.

[6 marks]

MARK SCHEME

Marks for this question: AO3 = 6

Level	Marks	Description
3	5–6	Explanation of two limitations is clear and effective. The answer is coherent and well organised with effective use of specialist terminology.
2	3–4	Explanation of two limitations is mostly effective although one or both lack explanation. The answer is mostly clear and organised, with appropriate use of specialist terminology. OR One limitation is explained at top of Level 3.
1	1–2	At least one limitation is presented. Explanation lacks detail/is minimal/is muddled. Specialist terminology is either absent or inappropriately used. OR One limitation is explained at top of Level 2.
	0	No relevant content.

Possible limitations:

- Theory of mind describes a state but does not offer a causal explanation
- Evaluative comparison with other explanations
- Use of evidence against the theory of mind explanation for autism – some people with autism can take the perspective of others
- Broader scientific issues eg difficulty showing cause and effect; reductionism
- Only explains deficits – cannot explain islets of ability/special talents demonstrated by autistic savants

Credit other relevant limitations

Exemplar response

One limitation of the Theory of Mind (TOM) explanation of autism is that it fails to account for some of the exceptional abilities shown by a number of autistic individuals known as savants. It concentrates on the impairment of cognitive functioning but does not explain 'autistic savants' eg who may have a very advanced mathematical/musical ability and not impaired at all in a particular cognitive area. This makes it a limited explanation of autism.

Another limitation of TOM as an explanation of autism is that there are alternative explanations for the findings of the TOM experiments, used to support the theory. For example, children may fail false-belief tasks (such as Sally-Anne, where they say that Sally will look for the marble in the box) because they cannot ignore the information they have about the position of the marble.

Examiner commentary

This is a Level 3 response. There are two appropriate limitations and the first, in particular, is explained fully. The second limitation needs a little further clarification, e.g. by explaining that the problem may not be a lack of a 'theory of mind' but rather that they cannot disengage from the knowledge they have about an object. Overall, the answer is coherent and well organised with effective use of terminology.

Mark awarded = 5

QUESTION

- 13** Discuss Piaget's and Vygotsky's views on the development of cognition. Refer to the inspectors' comments in your answer.

[16 marks]

MARK SCHEME

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

Level	Marks	Description
4	13–16	Knowledge of Piaget's and Vygotsky's views is accurate and generally well detailed. Discussion is thorough and effective. Application to the stem is appropriate and links between views of the two researchers and stem content are explained. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	9–12	Knowledge of Piaget's and Vygotsky's views is evident. Discussion is apparent and mostly effective. There are occasional inaccuracies. Application to the stem is appropriate although links to the views of the researchers are not always explained. The answer is mostly clear and organised. Specialist terminology mostly used effectively. Lacks focus in places.
2	5–8	Knowledge of Piaget's and Vygotsky's views is present but is vague/inaccurate or one view only is present. Focus is mainly on description. Any discussion is only partly effective. Application to the stem is partial. The answer lacks clarity, accuracy and organisation in places. Specialist terminology used inappropriately on occasions.
1	1–4	Knowledge of Piaget's and/or Vygotsky's views is limited. Discussion is limited, poorly focused or absent. Application is limited or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible content:

- Piaget – cognition develops as a result of active discovery; action on the world; child as scientist; schema development via assimilation and adaptation and striving for equilibrium; development takes place in stages (description of Piaget's stages is neither necessary nor expected); language as a byproduct of cognitive development
- Vygotsky – cognition is socially and culturally determined; child as apprentice learning tools of the culture; scaffolding as a support structure provided by more knowledgeable others and gradually withdrawn as child becomes more capable; peer learning; language as the key to cognitive development

Possible applications:

- Piaget – discovery learning 'students worked alone'
- Piaget – teacher's role is to provide the materials and environment 'they were given tasks and materials ... had to sort out the problem by trial and error'
- Vygotsky – child as apprentice and peer tutoring 'worked in pairs of different abilities so they could help each other'
- Vygotsky – scaffolding by more knowledgeable other 'teacher demonstrated until they could manage on their own'
- Vygotsky's views on language and thought 'talk it through'

Possible discussion points:

- Use of evidence for/against Piaget's view
- Use of evidence for/against Vygotsky's view
- Contrast/comparison of the two views
- Implications of the two views eg for education

Credit other relevant information

Exemplar response

Piaget produced a detailed theory of cognitive development based on observations and clinical interviews. He studied his own and other children's responses to problem solving and was particularly interested in the errors that children make at particular stages.

Piaget believed that children learned through the development of schemas whereby infants were born with a limited number of schemas, eg grasping, and built on these through processes of assimilation, accommodation and equilibrium – the whole process Piaget called adaptation. Assimilation is adding to an existing schema whereas true learning and development comes from the changing (accommodating) of schemas to incorporate new/different experiences. This is best explained through an example. A child learns to grasp and shake a rattle and when given a biscuit will exercise the existing schema and try to grasp and shake the biscuit. This results in disequilibrium as the biscuit does not rattle and thus the child develops a new schema for grasping and eating – this accommodation which brings the child back to equilibrium.

According to Piaget the child begins to understand the world through discovery and it is known as a Constructivist theory. Through careful use of observation, interview and experiment Piaget produced a 4 stage theory taking the infant from the sensori-motor stage, through the pre-operational stage at approximately age 2-7 years, then the concrete operational stage (7-11 years) and finally the formal operational stage at age 11+.

Piaget's theory of discovery learning has been very influential in primary education and has led to new methods that rely on play and discovery rather than didactic teaching. The child is like a little scientist working alone to solve problems and develop cognitively. This is evident in the script when the inspector writes of Mrs McLean – "Students work alone and solve problems by trial and error". This is the Piagetian method of allowing students to develop at their own pace with the teacher providing the appropriate materials to enable self-discovery.

Piaget's ideas and theory of cognitive development were based on his research with a small number of children, including his own, which many criticise as being a methodology that is open to bias and unrepresentative sampling. Certainly Piaget's use of the clinical interview did not include the scientific procedures and controls required by the scientific method. However, Piaget did gain a large amount of research to support his theory of cognitive development and the universal sequence of development is generally supported by cross-cultural research. Perhaps the biggest contribution Piaget has made is to education, particularly the early years, and traditional teaching methods have given way to a child-centred approach incorporating learning through experience, trial and error and active discovery.

Because Piaget's theory was maturational, it was considered children would learn when 'ready' and would progress individually - leaving no room for instruction and acceleration. This approach to

learning was challenged by Vygotsky.

Vygotsky's theory was one of social interaction and cultural experience. He believed cognitive development was a result of interactions between the child and others eg parents, teachers. Vygotsky also believed that language is important to thinking and that children's inner monologues, where they talk to themselves during early play, become internalised into thought by about age 7 years. Children learn best, according to Vygotsky, through guidance, and cognitive development can be accelerated through instruction. This is evident in the script from Mrs Watt who we learn "demonstrates/advises until they can manage alone". This relates to scaffolding whereby the child is given a level of help which gradually reduces as the child becomes more competent. Adults do this naturally with children, for example, when first completing a jigsaw the adult might scaffold by instructing to find the corners, the straight pieces, look at the picture etc. Gradually the child learns without prompting to complete the jigsaw alone.

The child will learn not only from adults, but others who are more competent eg older children, according to Vygotsky. This also links to the stem where we are told Mrs Watt writes: "Students work in pairs of different abilities – and help each other". This is known as Peer Tutoring and enables the child to learn from others. An important Vygotskian concept is that of Zone of Proximal Development (ZPD). This relates to the concept of learning by instruction but the child is only able to learn the next (proximal) step and not jump beyond this. The key then is to work out where the child actually is (zone of actual development) and move that child on within the proximal zone. This allows for learning to be accelerated according to Vygotsky's view of the development of cognition.

There have been some criticisms of Vygotsky's ideas on the benefits of instruction as some argue that the child may become dependent on instruction and show less independence and initiative. In addition, the Vygotskian concept of learning by instruction and social interaction directly conflicts with the Piagetian notion of 'readiness' and the child's innate tendency to adapt to the environment. Rather than through instruction, Piaget believed in direct experience and self-discovery. However, there is some empirical evidence to support the benefits of guidance and instruction to the development of cognition in children, such as the Hedegaard study in teaching within the zone of proximal development, and Vygotsky's ideas have become more prevalent in education today.

Examiner commentary

This is a Level 4 response. It is an exceptionally detailed answer, and it is surprising sometimes how much students can write in the limited time available. There is more detail than is required for a top level answer. Knowledge of Piaget's and Vygotsky's views is accurate and generally well detailed. Discussion is thorough and effective. Application to the stem is appropriate and links between views of the two researchers and stem content are explained. The answer is clear, coherent and focused. Specialist terminology is used effectively.

Mark awarded = 16

QUESTION

Topic: Schizophrenia

- 14** Discuss reliability **and/or** validity in relation to the diagnosis and classification of schizophrenia.

[8 marks]

MARK SCHEME

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

Level	Marks	Description
4	7–8	Outline of reliability and/or validity in relation to the diagnosis and classification of schizophrenia is accurate and generally well detailed. Discussion is effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	5–6	Outline of reliability and/or validity in relation to the diagnosis and classification of schizophrenia is evident. There are occasional inaccuracies. There is some effective discussion. The answer is mostly clear, organised and focused. Specialist terminology mostly used effectively.
2	3–4	Outline of reliability and/or validity in relation to the diagnosis and classification of schizophrenia is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy, organisation and focus in places. Specialist terminology used inappropriately on occasions.
1	1–2	Outline of reliability and/or validity in relation to the diagnosis and classification of schizophrenia is limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible Content

- Definitions of reliability in relation to diagnosis and classification – level of agreement on the diagnosis by different psychiatrists across time and cultures; stability of diagnosis over time given no change in symptoms
- Definitions of validity – the extent to which schizophrenia is a unique syndrome with characteristic, signs and symptoms
- Identification of issues such as range of symptoms across individuals, comorbidity and symptom overlap

Possible discussion points

- Use of evidence on the reliability of major classification systems (ICD IV, DSM IV or V)
- Use of evidence on reliability of diagnosis between different clinicians and across different cultures
- Range of different symptoms in different patients – positive and negative symptoms
- Evidence on comorbidity with eg depression, mixed syndromes eg schizo-affective disorder, symptom overlap eg bipolar disorder

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- Factors affecting reliability and validity of diagnosis
 - Wider implications of reliability and validity of diagnosis eg labelling, cultural bias.

Material must be explicitly linked to reliability and/or validity to earn credit.

Credit other relevant material

Exemplar response

Reliability in relation to the diagnosis and classification of schizophrenia (SZ) is concerned with the consistency with which clinicians can diagnose SZ and classify into a particular type. This means, can the same clinician give a consistent diagnosis and would different clinicians give the same diagnosis for the same symptoms? In addition it refers to consistency over time and within/between different countries and cultures. The classification system widely used is the Diagnostic and Statistical Manual (DMS-V) where particular symptoms have to be present for at least 6 months. Another classification system is the ICD and one of the problems is that the 2 systems do not agree on the number of subtypes of SZ. The reliability is questioned as a schizophrenic could be diagnosed as one subtype on the DMS and a different classification on the ICD. Another problem with the DMS is it is often considered to be culturally biased as it was designed by Americans and may not be relevant to other cultures. For example, in some cultures hearing voices is not considered abnormal.

Examiner commentary

This is a Level 2 response. The outline of reliability in relation to the diagnosis and classification of schizophrenia is sound but the focus of the answer is mainly on description. Any discussion is of limited effectiveness. There is an inaccuracy with the discussion of 'sub-types' as the DSMV classification system no longer identifies sub-types of schizophrenia. The organisation and coherence of the answer would be aided with the use of paragraphing. Specialist terminology is used inappropriately on occasions (e.g. DMS for DSMV).

Mark awarded = 4

QUESTION

- 15** What do the data in **Table 1** seem to show about the effectiveness of typical and atypical antipsychotics in the treatment of schizophrenia?

[4 marks]

MARK SCHEME

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Knowledge of the effectiveness of atypical and typical antipsychotics on positive and negative symptoms is clear and mostly accurate. The findings in the table are used appropriately. The answer is generally coherent with effective use of terminology.
1	1–2	Some knowledge of the effectiveness of atypical and typical antipsychotics and positive and negative symptoms is evident. Use of findings from the table is not always effective. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate.
	0	No relevant content.

- Atypical and typical antipsychotics are equally effective against positive symptoms with more than half of patients responding well
- The main difference is that negative symptoms respond better to atypical antipsychotics, 30% improve compared with typical antipsychotics 16%
- Atypical antipsychotics are more effective against negative symptoms

These findings support the view that they act on different neurotransmitters'

Exemplar response

The table shows that patients with positive symptoms respond equally well to atypical and typical antipsychotics – with 60% of patients responding effectively to each type of drug. The response to negative symptoms from both types of drug show less effectiveness than with positive symptoms.

Examiner commentary

This is a Level 1 response. There is some knowledge of the effectiveness of atypical and typical antipsychotics for positive symptoms, and this part of the answer is reasonably clear with effective use of findings from the table. With respect to negative symptoms there would need to be some comment regarding the difference in effectiveness between atypical antipsychotics and typical antipsychotics. The answer lacks sufficient detail.

Mark awarded = 2

QUESTION

- 16** Apart from effectiveness, briefly explain **one** limitation of drug therapy for schizophrenia. **[2 marks]**

MARK SCHEME

Marks for this question: AO3 = 2

Content:

- All drugs have side effects that can be severe and may lead to patients avoiding medication and hence to relapse
- It is questionable whether or not severely affected patients can give informed consent to medication
- Drugs may simply be suppressing symptoms

2 marks for a clear and coherent limitation

1 mark for a vague/muddled limitation or limitation merely identified

Exemplar response

The main limitation with drug therapy for schizophrenia (SZ) is the side effects – particularly of anti-psychotics such as chlorpromazine which reduces the neurotransmitter dopamine by blocking the receptors in the synapses of the neuron and can cause tremours.

Examiner commentary

There is an appropriate limitation identified (side-effects) but it is not explained why this is such a limitation, for example because it can lead to the patient stopping medication and relapse.

Mark awarded = 1

QUESTION

17 Briefly outline family dysfunction as an explanation for schizophrenia.

[2 marks]

MARK SCHEME

Marks for this question: AO1 = 2

Possible content

- Characteristics of dysfunction eg difficulties in communication, high levels of interpersonal conflict
- Critical and controlling parents, expressed emotion
- The role of double bind in the development of negative symptoms
- The role of hostility and disapproval in positive symptoms and relapse
- The role of expressed emotion in relapse

2 marks for a clear and coherent outline

1 mark for a vague /muddled outline

Exemplar response

Family dysfunction refers to the communication pattern and relationships with families which can cause stress and schizophrenic symptoms. Parents of schizophrenics have been investigated and are sometimes shown to be critical and controlling and have more family conflicts. This has been supported by researchers who have found that when 'well schizophrenics' are placed back into the family situation, relapse can occur.

Examiner commentary

This is a clear, accurate and coherent outline which contains enough detail of family dysfunction as an explanation for schizophrenia to gain both marks.

Mark awarded = 2

QUESTION

- 18** Discuss token economies as a method used in the management of schizophrenia. **[8 marks]**

MARK SCHEME

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

Level	Marks	Description
4	7-8	Outline of token economies is generally accurate and mostly well detailed. Discussion is thorough and effective. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail sometimes lacking.
3	5-6	Outline of token economies is generally accurate. Discussion is mostly effective. The answer is mostly clear and organised. Specialist terminology mostly used effectively.
2	3-4	Outline of token economies is present. There are some inaccuracies. Discussion is sometimes effective. There is some appropriate use of specialist terminology.
1	1-2	Outline of token economies is limited and lacks detail. There is substantial inaccuracy/muddle. Discussion is limited, poorly focused or absent. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible content

- Outline of token economies – awarding of ‘tokens’ when patients with schizophrenia show desirable behaviour. Tokens can be exchanged later for eg sweets
- Based on Skinnerian operant conditioning principles
- Used for behavioural shaping and management so that patients in long stay hospitals are easier to manage

Possible discussion points

- Evidence suggest token economies can be effective in improving behaviour in psychiatric hospitals
- Token economies do not address symptoms of schizophrenia, so they are not a ‘treatment’
- Not effective with unresponsive patients eg with negative symptoms
- Ethical issues – treats patients as lab rats

Credit other relevant material.

Exemplar response

Token economy is a behavioural treatment for schizophrenia (SZ) and is based on the assumption that schizophrenic symptoms have been reinforced. This is based on operant conditioning. Token economics have been used in hospitals and Paul and Lents carried out a study to investigate the effectiveness of token economics. A reward in the form of a token that could be exchanged for things they wanted (eg cigarettes) was given to schizophrenic patients when they displayed appropriate behaviour such as 'brushing hair'.

Paul and Lents found SZ symptoms did reduce with the use of token economy and this improvement carried on during the hospital stay. The problem was that patients tended to relapse once out of the hospital and were no longer being reinforced for their behaviour. It is also considered these days to be unethical, particularly when trying to shape behaviour using rewards such as food – which is a basic right.

Examiner commentary

This is a Level 3 response. The outline of token economies is generally accurate. The answer is clear and organised with specialist terminology mostly used effectively. To improve, the answer would need further expansion of the discussion points raised. The evidence is appropriate but the discussion of the problems with the Paul and Lentz study would benefit from a link back to the question set. For example, what do the results from this research (and the evaluation of the research) mean with respect to the efficacy of token economies?

Mark awarded = 5

Topic: Forensic psychology

QUESTION

- 35** Complete **Table 5** by calculating the median for the two groups. Show your working. Why did the psychologist use the median as a measure of central tendency rather than the mean?
[4 marks]

MARK SCHEME

Marks for this question: AO2 = 4

Content

- Median is 34.5 for Group A ($32 + 37/2$) and 50.5 for Group B ($45 + 56/2$)

1 mark for each accurately calculated median

Plus

2 further marks for explaining that the median is used because the level of measurement is not interval – ratings data with units of variable size.

Exemplar response

Group A, median = $32 + 37 = 69 \div 2 = 34.5$

Group B, median = $45 + 56 = 101 \div 2 = 50.5$

Median is most appropriate because the DV is a rating scale (0-100) and not interval data.

Examiner commentary

Both medians are accurately calculated. There is a clear and appropriate explanation of why the median was chosen as the measure of central tendency.

Mark awarded = 4

QUESTION

36 Discuss biological explanations of offending behaviour.

[16 marks]

MARK SCHEME

Marks for this question: AO1 = 6 and AO3 = 10

Level	Marks	Description
4	13–16	Knowledge of biological explanations of offending behaviour is accurate and generally well detailed. Discussion is thorough. The answer is clear, coherent and focused. Specialist terminology is used effectively. Minor detail and/or expansion of argument sometimes lacking.
3	9–12	Knowledge of biological explanations of offending behaviour is evident. There are occasional inaccuracies. Discussion is apparent and mostly effective. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.
2	5–8	Some knowledge of biological explanations of offending behaviour is present. Focus is mainly on description. Any discussion is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–4	Knowledge of biological explanations of offending behaviour is limited. Discussion is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology either absent or inappropriately used.
	0	No relevant content.

Possible content

- Genetic explanations, focusing on 'criminal' genes such as the MAOA gene (which controls levels of brain serotonin) linked to criminal aggression
- Brain pathology explanations, possibly linked to genes and/or early abuse; examples include the relationship between psychopathy and abnormalities of frontal lobe and amygdala function
- Credit biological aspects of Eysenck's theory – cortical underarousal

Possible discussion points

- Evidence from MZ/DZ twin studies and family studies looking at genetic factors
- Findings support a genetic involvement in criminal behaviour but concordance rates in MZ twins are not high and leave plenty of room for non-genetic environmental factors
- Brain scanning studies that show pathology in brains of criminal psychopaths, but cannot conclude whether these abnormalities are genetic or signs of early abuse
- Some evidence from genome-wide association studies for particular genetic factors linked to criminal psychopathy, but little replication
- Counter-evidence for environmental factors in offending behaviour; socio-economic status, social learning theory
- General nature of 'offending behaviour' – some specific forms may be more 'biological' than others eg physical aggression

Credit other relevant material.

Exemplar response

The two biological explanations that will be discussed are genetic and neurophysiology explanations. These will be outlined along with research evidence and then evaluated.

The genetic theory of crime is concerned with biological factors that are inherited. Twin and adoption studies have been used to investigate the genetic basis to crime. If crime is genetic then one would expect a higher concordance rate between identical twins (MZ) than non-identical twins (DZ) who only share 50% of their genes rather than the 100% for MZ twins. Early studies found a very high concordance rate for MZ twins but unfortunately such studies failed to untangle the environment from the heritability component. The most effective way to study the effect of genes whilst controlling for the environment is by adoption studies and a number of such studies have been carried out.

The reason for adoption studies is that the criminal behaviour of both biological and adoptive parents can be compared with the adopted child. If there is a higher concordance of criminal behaviour between the adoptees and biological parents, then crime may have a genetic component.

Twins reared apart from birth were investigated by Grove in a double-blind study. At age of around 40 years it was found that criminal behaviour did seem to be partly inherited as concordance for APD was almost 30%. Further evidence by Mednick with a very large sample of Danish adoptees also found a genetic component to criminal behaviour, providing further support for the genetic explanation for crime.

There are some limitations, however, even with the adoption studies as they do not show 100% concordance (or even near to this) and environmental influence cannot be ruled out.

Furthermore, twins (even separated twins) often shared quite similar environments. Twins could be adopted locally and attend the same/similar schools; have similar middle-class parents etc.

Studies into the neurophysiology of the human brain have shown some evidence for physiological differences between the criminal and non-criminal brain. For example, in a study of 2000 offenders in Canada it was found that 90% had damage to the frontal/temporal regions of the brain. Hare also found that 15% of psychopaths had abnormal slow wave activity in the temporal lobe (compared to 22% of non-psychopaths). However, care should be taken with such neurophysiology findings as it is unclear whether the differences in brain physiology/function cause criminal behaviour OR criminal behaviour results in such changes.

There are two general criticisms of biological explanations, both genetic and neurophysiological. The first is that they are determinist and give no room for the individual to choose freely to behave well, and biological explanations are reductionist, reducing all complex criminal behaviour down to simple physiology and/or genes.

Examiner commentary

This is a Level 3 response. Knowledge of biological explanations of offending behaviour is evident. The genetic explanation is outlined more thoroughly than explanations relating to neurophysiology. There are occasional inaccuracies for example in the reference to the 'Hare' study when the percentage of slow-wave brain activity for non-psychopaths was actually 2% and not 22%. Discussion is apparent and mostly effective but needs to be more thorough to gain further marks. The answer is mostly clear and organized, with specialist terminology used effectively.

Mark awarded = 9