

Issues and Debates

Using an example of a research study you have learned about in psychology, outline what is meant by a nomothetic approach to psychological investigation.

[4 marks]

Mark Scheme:

Marks for this question: AO1 = 4

Content:

Up to 2 marks for knowledge of what is meant by a nomothetic approach.

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

- a nomothetic approach involves studying a (large) sample of participants
- using the findings to generate or substantiate general laws/models of behaviour; make inferences about the wider population/make generalisations; make predictions.

Plus

2 marks for an appropriate research study (no need to name), with clear and coherent explanation of how findings from the sample have been used to generate a theory/applied to a larger population.

OR

1 mark for a relevant research study with limited/muddled explanation.

Suitable examples can be taken from any area of psychology, eg

- Milgram tested a sample of participants to propose his theory of situational obedience
- Ainsworth tested infants using the Strange Situation to propose three attachment types.

Credit other relevant material/examples.

Referring to the example used in your answer to Question **04**, briefly explain how **the same** behaviour might be studied using an idiographic approach to psychological investigation.

[2 marks]

Mark Scheme:

Marks for this question: AO3 = 2

Award 1 mark for an appropriate idiographic method eg the case study method, single-case observation, in-depth interview etc

Plus

1 mark for how it could be used with this behaviour eg carrying out a case study of a mother and baby to study their unique attachment behaviours.

Credit other relevant material.

'Psychologists sometimes adopt a reductionist approach to their investigations when they want their research to be objective and empirical.'

Discuss reductionism in psychological research. Refer to the statement above in your answer.

[16 marks]

Mark Scheme:

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

Level	Marks	Description
4	13–16	Knowledge of reductionism is accurate and generally well detailed. Application to the statement 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 reductionism 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 reductionism is present. Focus is mainly on description. Any discussion/application 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 reductionism 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:

- reductionism – explaining/studying complex and meaningful behaviour/experience by breaking it down into smaller component parts/constituents/elements
- levels of explanation – basic unit level to more complex holistic level
- types of reductionism: biological – explaining behaviour at the level of genes, brain chemicals etc; environmental – explaining behaviour at the level of stimulus-response units; experimental reductionism; machine reductionism – explaining behaviour in terms of mechanistic models
- objectivity, use of empirical methods – basic scientific principle that evidence should be observable and unaffected by opinion/subjective interpretation.

Possible application:

Links between reductionism and objectivity/empirical methods:

- explaining/understanding behaviour at the basic component level of biological units is objective and empirical, eg measurement of levels of neurotransmitters like serotonin and dopamine
- explaining/understanding behaviour at the basic component level of stimulus-response links (eg classical/operant conditioning) is objective, empirical as it involves manipulation of stimuli and observation/recording of responses
- explaining information processing at the level of processing units each with separate features (eg multistore model) is objective – involves empirical manipulation/observation of variables in experiments.

Possible discussion points:

- the reductionist approach fits well with psychology's drive for scientific status and the consequent focus on objectivity and empiricism
- reductionism leads to clearly defined variables which can be operationalised and observed objectively which allows for the inference of causal relationships – establishing a cause and effect relationship
- reductionism leads to loss of meaning – components do not add up to reflect whole experience
- contrasts with holism – studying and valuing human experience as a whole, considering meaning, feeling, personal experience/context. Only by studying the whole can we really understand human experience
- some behaviours, particularly social behaviours can only really be investigated in the holistic context in which they occur
- usefulness of reductionist treatments, eg use of drugs – effectiveness can be empirically tested
- contrast with the types of investigation preferred by humanistic psychologists such as Maslow and Rogers – use of case studies, diaries, interviews – to yield richer, more detailed information
- difficulty of finding a balance between objective, empirical method and the striving for meaningful information
- comparison of approaches in terms of reductionism/objectivity/empirical approach.

Examiner Report:

The question on reductionism was not one that students could have pre-prepared with the result that performance tended to be quite limited. Many answers confused reductionism with determinism and/or reductionism with the nomothetic approach. References to objectivity and empiricism were sometimes sprinkled around without any real application. Better answers could offer specific examples of reductionist research and explain how they involved the empirical study of objective evidence. Quite a few answers were simply pre-learned responses on the holism versus reductionism debate.

Cognition and Development

Discuss theory of mind **and** Selman's levels of perspective-taking in the development of social cognition.

[16 marks]

Mark Scheme:

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

Level	Marks	Description
4	13–16	Knowledge of theory of mind and Selman's levels of perspective-taking in the development of social cognition is accurate and generally well detailed. 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 theory of mind and Selman's levels of perspective-taking in the development of social cognition 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	5–8	Limited knowledge of theory of mind and Selman's levels of perspective-taking in the development of social cognition is present. Focus is mainly on description. Any discussion is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. OR one aspect at Level 3/4.
1	1–4	Knowledge of theory of mind and Selman's levels of perspective-taking in the development of social cognition 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. OR one aspect at Level 1/2.
	0	No relevant content.

Possible content:

- theory of mind (ToM) – the idea that children develop an understanding of what others are thinking, eg their beliefs, intentions, motives etc
- ToM is investigated using various 'mind reading' tasks, eg false belief tasks, the Sally-Anne studies, the eyes task
- perspective-taking or role-taking was investigated by Selman using interpersonal dilemmas requiring multiple perspectives/social and moral understanding, eg Holly's kitten
- involves ability to take the view of others, five levels showing age-related shift from egocentric view to understanding other people's points of view
- Selman's levels: egocentric, social informational role-taking, self-reflective role-taking, mutual/third-party role-taking, social and conventional system (societal) role-taking.

Possible discussion:

- use of evidence for theory of mind, eg Baron Cohen (1985), Wimmer and Perner (1983)
- use of evidence to support/contradict Selman's theory, eg Gurucharri and Selman (1982) – longitudinal evidence for age-related change; Selman and Byrne (1974) – viewpoint of characters in a dilemma, changes with age; Fitzgerald and White (2003) – linked parenting style and perspective taking
- parallels between Selman's work (eg Holly's dilemma) and ToM research (eg Sally-Anne studies) and how they relate to Piaget's findings on egocentrism
- status of ToM as an explanation for ASD and alternative explanations
- practical applications, eg in assessment of ASD, family therapy, mediation etc
- biological underpinnings, eg role of mirror neurons in social cognition
- implications, eg for age of responsibility, apportioning responsibility, blame etc.

Credit other relevant material.

Outline and briefly discuss the role of the mirror neuron system in social cognition.

[8 marks]

Mark Scheme:

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

Level	Marks	Description
4	7–8	Outline of the role of the mirror neuron system in social cognition 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	Outline of the role of the mirror neuron system in social cognition 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 outline of the role of the mirror neuron system in social cognition is present. Focus is mainly on description. 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	Outline of the role of the mirror neuron system in social cognition 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:

- believed to be responsible for human ability to share understanding of intention and emotional experience
- brain cells that are activated when we observe actions carried out by another person
- cell activation is the same as if we had carried out the action ourselves
- links with work on social understanding, eg perspective taking, theory of mind, and empathy
- deficits in social cognition may be linked to problems in mirror neuron function
- investigated using scanning techniques – certain areas thought to be rich in mirror neurons include pars opercularis and Brodmann's area of the frontal lobe.

Possible discussion points:

- mirror neuron system could be fundamental to the development of human society
- might explain social understanding, eg perspective taking and theory of mind so deficits in social cognition may be linked to problems in mirror neuron function
- existence is controversial – individual cells can only be identified by their function
- scanning studies which do not locate/identify individual cells, just activity in an area/region
- some evidence of impaired mirror neuron activity in cases of autistic spectrum disorder (Hadjikhani 2007, Dapretto 2006)
- critics – they may just be a by-product of social interaction
- links with broader issues, eg determinism.

Credit other relevant material.

Examiner Report:

There were some detailed and well-informed responses to this question which were supported with references to evidence and clearly linked to social cognition. At the other end of the scale there were answers that consisted of vague explanations of how brains/thinking enables social learning and copying. Some students who showed strong knowledge and understanding of mirror neurons made little attempt to explain their role in social cognition.

Discuss what Baillargeon's research has told us about early infant abilities.

[16 marks]

Mark Scheme:

Marks for this question: AO1 = 6 marks, AO3 = 10 marks

Level	Marks	Description
4	13 - 16	Knowledge of what Baillargeon's research has told us about early infant abilities is accurate and generally well detailed. 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 Baillargeon's research has told us about early infant abilities 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	5 - 8	Limited knowledge of what Baillargeon's research has told us about early infant abilities is present. Focus is mainly on description. Any 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 Baillargeon's research has told us about early infant abilities 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:

- focus on infants' knowledge of the physical world
- investigations of core knowledge theory (focus on object representation); infants have an innate, hard-wired physical reasoning system enabling object perception and representation
- violation of expectation studies – familiarisation with possible events (habituation stage) introduction of impossible events (expt stage); use of looking time to indicate surprise that expectation has been violated
- specific studies, eg tall/short rabbit and window (Baillargeon and Graber 1987) drawbridge and box (Baillargeon 1995); truck and ramp (Baillargeon 1987); tall/short carrot and window (Baillargeon and DeVos 1991); Minnie Mouse (Aguilar and Baillargeon 1999).

Possible discussion:

- challenge to Piaget's age at which infants can represent objects (Piaget's view that object permanence arises at approx. 8 months)
- Baillargeon's improvements on Piaget's object permanence studies
- infants in Baillargeon's research (approx. 2 ½ months+) – not new-born
- implications of accepting view that ability to reason about physical world is innate; basic pre-programming enables rapid learning and so confers survival value; focus on novel/unusual facilitates survival
- parallels between Baillargeon's view of an innate physical reasoning system and other theories about innate abilities, eg Chomsky's innate language acquisition device
- discussion of scientific value of Baillargeon's paradigm including: use of infants in controlled experiments: reliance on inference and the interpretation of 'looking' and 'surprise' as dependent variables
- alternative interpretations, eg infants observe 'difference' rather than show 'surprise' (Schöner and Thelen 2004); results show attraction to novel/engaging stimuli rather than surprise (Cashon and Cohen 2000)
- wider issues and debates, eg nature v nurture, biological determinism.

Only credit methodological issues if used to discuss findings.

Examiner Report:

This question was generally competently answered, although there was a tendency to give lengthy methodological descriptions of the violation of expectation research rather than focus on what the research has shown. Weaker answers gave detailed and often muddled descriptions of the antics of rabbits of all sizes and barely mentioned the findings, or crucially omitted the ages of the children. Better discussions were those that considered not just the experimental work, but also the more general core knowledge theory, a route that enabled broader analysis in relation to nature-nurture and determinism. Comparisons with Piaget's work on object permanence were usually effective.

Schizophrenia

Evaluate antipsychotics as a therapy for schizophrenia.

[8 marks]

Mark Scheme:

Marks for this question: AO3 = 8

Level	Marks	Description
4	7–8	Evaluation of antipsychotics as a therapy for schizophrenia 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	Evaluation of antipsychotics as a therapy for schizophrenia is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately.
2	3–4	Evaluation of antipsychotics as a therapy for schizophrenia is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1–2	Evaluation of antipsychotics as a therapy for schizophrenia is limited and poorly focused. 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 evaluation:

- use of evidence for effectiveness or otherwise, eg meta-analysis of the use of chlorpromazine (Adams 2005); atypicals, eg risperidone, are more effective than typical anti-psychotics (Bagnall 2003); comparison of chlorpromazine with placebo (Thornley, 2003)
- relative effectiveness with certain symptoms – typical drugs more effective for positive symptoms
- side effects, eg weight gain, muscle tremors etc and the need to balance costs and benefits to the patient
- preventative use – olanzapine used effectively with high risk individuals
- historical appraisal – revolutionised treatment of patients with psychosis – no longer any need for physical restraint
- short-term v long-term benefits, possibility of relapse, revolving door effect
- comparison with alternatives, eg family therapy, cognitive therapy
- implications for the patient and family, and for the economy; reasoned discussion of cost/time

Credit other relevant material.

Discuss **one or more** biological explanations for schizophrenia.

[16 marks]

Mark Scheme:

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

Level	Marks	Description
4	13 - 16	Knowledge of one or more biological explanations for schizophrenia 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	9 - 12	Knowledge of one or more biological explanations for schizophrenia 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	5 - 8	Limited knowledge of one or more biological explanations for schizophrenia is present. Focus is mainly on description. Any 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 biological explanations for schizophrenia 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:

- genetic explanation – schizophrenia is heritable/inherited through the generations through transmission of genes/DNA; runs in families/familial link; involves a combination of affected genes/is polygenic; candidate genes, eg PCM1
- dopamine hypothesis – schizophrenia is linked to excess activity of the dopamine in subcortical areas of the brain (hyperdopaminergia) or to low activity of dopamine in outer areas/cortex especially the prefrontal cortex (hypodopaminergia)
- role of other neurotransmitters, eg serotonin, acetylcholine, glutamate
- other neural correlates – size/function of various brain structures has been found to be linked to schizophrenia and/or to specific symptoms of the disorder, eg enlarged ventricles/reduced grey matter density/activity of basal ganglia
- knowledge of explanations embedded in research.

Possible discussion points:

- use of evidence supporting/refuting a biological cause, eg twin and adoption studies; scanning evidence
- consequences of assuming a genetic cause, eg family responsibility; determinism; blame, etc
- problems determining cause and effect – eg unusual dopamine activity may be a consequence of the disorder rather than the cause
- unusual neural activity may be due to medication rather than a factor in the disorder
- treatment fallacy – just because dopamine blockers reduce symptoms it does not mean that dopamine activity is the cause
- implications for treatment, eg early identification, neural explanations lend themselves to medication etc.
- broader issues and debates, eg biological reductionism versus a more holistic diathesis-stress approach
- comparison with other explanations.

Credit other relevant material.

Examiner Report:

Many answers were very well prepared, or perhaps well learned, with detailed accounts of genetic evidence, dopamine and neural correlates. Whilst knowledge was generally detailed and accurate, discussions sometimes revealed limited understanding or strayed off the topic. A typical example of this is where students might present drug evidence in support of the role of dopamine, then fell into discussion of the use of drugs and comparison with other treatments/therapies. Some answers showed significant confusion, lack of understanding or only the loosest grasp of terminology, for example, weak answers talked of 'dopamine flowing round the body' and 'parts swelling in the brain'. It is worth noting that some of the most successful answers were from those brave students who opted for a depth approach and focused on a single biological explanation. Limiting the range of material meant that they had time to provide detailed description and fully elaborated discussion.

Forensic Psychology

Which way of dealing with offending involves victims?

[1 mark]

Mark Scheme:

Marks for this question: AO1 = 1

1 mark for restorative justice programmes.

Referring to your answer to Question [↑] describe what a case worker might recommend in order for Jack to deal with his offending.

[4 marks]

Mark Scheme:

Marks for this question: AO2 = 4

Level	Marks	Description
2	3–4	Outline of recommendation is clear and detailed. Application shows sound understanding of the way of dealing with offending. The answer is coherent with appropriate use of specialist terminology.
1	1–2	Outline of recommendation is limited/muddled. Detail is lacking. Application shows some misunderstanding or lack of clarity. Use of specialist terminology is either absent or inappropriate.
	0	No relevant content.

Possible content:

- case worker would recommend Jack and victim meet for restorative justice sessions then Jack will see the consequences – encouraging empathy in Jack
- case worker should encourage the burglary victim to explain to Jack what effect the burglary has had, eg loss of confidence, fear of people breaking into the house – this is to empower the victim and promote healing
- case worker could arrange for Jack to provide some form of restitution, eg returning the burgled goods or mending broken window etc.

Credit other relevant material.

Outline **one** limitation of the way of dealing with offending you have described in your answer to Question above.

[2 marks]

Mark Scheme:

Marks for this question: AO3 = 2

2 marks for a clear and coherent limitation with some elaboration.

1 mark for a limited/muddled explanation.

Possible limitations:

- limited appropriateness – some victims may refuse to meet with the offender because they fear intimidation
- restorative justice programmes differ widely so are very difficult to evaluate – there is no one model so every case is different
- seen as a soft option where offenders might pretend to show remorse when they do not really; does not satisfy the public demand for retribution/punishment.

Examiner Report:

It was pleasing to see how many students answered the multiple-choice question correctly. The naming question after each of the stems was generally answered correctly except for Q31 where several students were unable to name 'restorative justice'. Fortunately, this did not seem to affect the performance on follow-on questions. The 4-mark application questions requiring use of the stem were usually competently answered, although there were some weaker answers with little foundation in psychology.

A group of probation and prison officers attended a training session on how to deal with offenders. They each offered suggestions and the group leader wrote some of the suggestions on a flip chart. **Table 6** below shows some of the suggestions.

Table 6

Get him to talk about what makes him angry Make him do something to help the victim Give him points for TV time when he behaves well Teach him how to calm himself down Teach him the link between behaviour and consequences

Discuss **one or more** ways of dealing with offending behaviour. Refer to some of the suggestions in **Table 6** in your answer.

[16 marks]

Mark Scheme:

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

Level	Marks	Description
4	13 - 16	Knowledge of one or more ways of dealing with offending behaviour is accurate with some detail. 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 ways of dealing with offending behaviour is evident but there are occasional inaccuracies/omissions. Application and/or 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 one or more ways of dealing with offending behaviour is present. Focus is mainly on description. Any discussion and/or application 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 ways of dealing with offending behaviour is very limited. Discussion/application 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:

- anger management – cognitive therapy involving three stages – cognitive preparation/restructuring/appraisal to understand cause; skills acquisition, eg use of relaxation, mantra; application practice - using new skills in role play
- behaviour modification – behavioural therapy based on principles of operant conditioning; systematic use of reinforcement for desired behaviours; tokens as secondary reinforcers to be exchanged for primary reinforcers
- restorative justice – rehabilitation through reconciliation and collaboration; offenders made aware of effect of their actions; supervised meetings with victim; pay reparation to victim/society
- custodial sentencing – aims are deterrence, incapacitation, retribution and rehabilitation
- knowledge of ways of dealing with offending behaviour embedded in evidence.

Possible application:

- anger management involves cognitive awareness/understanding - talking about what makes him angry
- anger management involves acquisition of skills/strategies to control own anger – teach him how to calm himself down
- behaviour modification involves use of reinforcement for good behaviour – points for TV time as tokens/secondary reinforcement (could be applied in custodial setting); seeing the link between behaviour and consequences
- restorative justice involves making reparation – something to help the victim, seeing the consequences for the victim.

Possible discussion points:

- use of evidence for effectiveness/lack of effectiveness/effects on recidivism
- whether the intervention has any long-term beneficial effects, eg anger management offers transferable skills, life enhancement
- whether there is a need for trained personnel, eg anger management
- whether the intervention can be used in different settings, eg behaviour modification can only be used in controlled environment
- victim effects – whether the victim will co-operate, will benefit etc
- restorative justice as an easy way out – no real remorse
- attitudes of wider society and societal demand for retribution
- negative effects of custodial sentencing eg brutalisation, effects on mental health etc
- comparison of different ways of dealing with offending.

Credit other relevant material.

Examiner Report:

This was usually well answered, with many effective responses including material on restorative justice, token economy and anger management. Whilst many answers were detailed and well applied, the application here was often less well-developed than in Q36. Where students performed less well overall it was often because knowledge was lacking, for example, where token economy was presented there was little or no reference to operant conditioning theory and reinforcement. Similarly, with restorative justice, the knowledge in some responses consisted of 'a meeting between the victim and the offender'. Relatively few answers used custodial sentencing as the basis for a response, and those that did, tended to score lower marks. Discussions were often informed and well elaborated.

