

## Holism and Reductionism - Mark Scheme

### Q1.

[AO3 = 4]

In **each case** award marks as follows:

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

**1 mark** for a limited / muddled strength / limitation.

#### **Possible strengths:**

- studying basic units of behaviour underpins the scientific approach / adds weight to scientific research
- more objective to consider basic components of behaviour
- leads to greater clarity of understanding, e.g. at the chemical, cellular level
- better able to isolate cause when studying basic units of behaviour, e.g. can see which chemicals are implicated in certain behavioural disorders, then may be able to effect treatment
- parsimonious – the simplest explanation is often the best.

#### **Possible imitations:**

- simplistic and ignores the complex interaction of many factors
- leads to us losing sight of behaviour in context
- less able to understand the behaviour because we do not understand its meaning - loss of validity
- ignores emergent properties / distracts from a more appropriate level of explanation.

Credit other relevant strengths and limitations.

[4]

### Q2.

[AO1 = 2]

**2 marks** for clear and coherent outline which explains how explanations vary from those at a lower or fundamental level focusing on basic components or units to those at a higher more holistic multivariable level.

**1 mark** for vague or incomplete outline which refers to explanations at fundamental / basic and more holistic levels.

**0 marks** for mere reference to there being different levels of explanation.

Credit answers where knowledge of term is embedded in an example.

**Q3.**

(a) [AO2 = 4]

Level	Marks	Description
2	3 – 4	Knowledge of both holism and reductionism is clear and mostly accurate. Application to the scenario is mostly appropriate. The answer is generally coherent with effective use of psychological terminology.
1	1 – 2	Some knowledge of holism and/or reductionism is evident. Application to the scenario is not always effective or not presented in psychological terms. The answer lacks accuracy and detail.  OR Either holism <b>or</b> reductionism explained and applied at Level 2.
	0	No relevant content.

**Application:**

- Holism – focus on the whole system or person
- Reductionism – focus on constituent elements or smaller, simpler aspects
- Dr Grant takes a reductionist approach focusing just on biological mechanism
- Dr Austin takes a more holistic approach focusing on broader experiences and circumstances

Credit other relevant material.

(b) [AO3 = 1]

**1 mark** for a brief valid suggestion

**Possible suggestions:**

- Keep information confidential
- Show respect for the patient eg listening, appreciating the patient's perspective
- Ensure the patient is not harmed – does not feel worse after the interview than before

Credit other relevant suggestions.

**Q4.**

(a) [AO2 = 2]

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

- excitement is a broad construct / complex behaviour / has many aspects
- heart rate is a narrow, biological / physical component / unit / element / factor in overall excitement.

2

(b) [AO3 = 4]

For **each** outline award marks as follows:**2 marks** for a clear and coherent outline with some elaboration.**1 mark** for a limited / muddled outline.**Possible content:**

- questionnaire measuring attitude – questions assess how the participant feels about going on the roller coaster
- rating scale of own excitement – the participant could rate their perceived level of excitement on a scale of 1 – 10
- observation of non-verbal behaviour whilst waiting in the queue; e.g. tallying appropriate behavioural categories
- interviews before / after the participant has been on the ride asking questions about how they felt / whether they enjoy other exciting occasions / events / how they cope with excitement, etc.

Do not credit measures of biological function.

Just naming a method e.g. questionnaire / interview / observation is not sufficient.

4

**[6]****Q5.****Marks for this question: AO1 = 6, AO3 = 10**

Level	Marks	Description
4	13 – 16	Knowledge is accurate and generally well detailed. Discussion / evaluation / application is thorough and effective. Effective use of at least one topic. 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 is evident. There are occasional inaccuracies. Discussion / evaluation / application is apparent and mostly effective. Some use of at least one topic. The answer is mostly clear and organised. Specialist terminology is mostly used effectively. Lacks focus in places.

2	5 – 8	Some knowledge is present. Focus is mainly on description. Any discussion / evaluation / application is only partly effective. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions.
1	1 – 4	Knowledge is limited. Discussion / evaluation / application 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.

Please note that although the content for this mark scheme remains the same, on most mark schemes for the new AQA Specification (Sept 2015 onwards) content appears as a bulleted list.

### **AO1**

Marks for demonstrating knowledge and understanding relevant to the holism-reductionism debate. Likely content: the types of reductionism such as structuralism, biological, behaviourist / environmental / S-R; psychic-reductionism; levels of explanation; humanistic psychology and emphasis on the whole person / whole of experience; Gestalt psychology; interactionism.

Minimal credit for simply defining the debate: whether or not behaviour should be explained or studied as a whole or its component parts.

### **AO3**

Marks for discussion, analysis and application of the debate to topics. Likely discussion points might stem from an evaluation of reductionism and comparisons with holism and interactionism, and include: advantages of parsimony; scientific and analytic approach; ease of testing; scientific support and credibility; control and prediction, implications for treatment.

Limitations may include oversimplification; value and reduced validity of explanation. References to topics might cover theories of learning eg conditioning vs. insight learning; gender; perception; face recognition; schizophrenia; substance abuse; forensic psychology.

Credit references to approaches and to other philosophical debates.

Credit use of relevant evidence.