



PSY.APP1 Wundt, Introspection and the Emergence of Psychology as a Science

AQA 7182 · Calculators not allowed · about 50 minutes

Total Marks

--

Name: _____ Date: ____ / ____ / ____

Answer all questions in full sentences where the command word requires explanation or discussion. Time guidance: 50 minutes.

- 1** Outline the significance of Leipzig 1879 for the history of psychology as a science, naming the founder and what was established there.
Outline the significance of Leipzig 1879 for the history of psychology as a science.

(Total for Question 1 is 1 mark)

- 2** Describe what Wundt meant by 'introspection' as a method used in his Leipzig laboratory, specifying how participants reported their mental processes.
Describe Wundt's use of introspection in his Leipzig laboratory.

(Total for Question 2 is 2 marks)

- 3** Outline two features of Wundt's experimental procedure in the Leipzig laboratory that aimed to make psychology scientific.
Outline two features of Wundt's experimental procedure that aimed to make psychology scientific.

(Total for Question 3 is 2 marks)

- 4** Describe how Wundt attempted to separate psychology from philosophy in terms of aims and methods used in his laboratory research.
Describe how Wundt attempted to separate psychology from philosophy through his laboratory aims and methods.

(Total for Question 4 is 3 marks)

- 5** Outline one practical step Wundt used to make introspection more repeatable and scientific in his experiments at Leipzig.
Outline one practical step Wundt used to make introspection more repeatable and scientific.

(Total for Question 5 is 2 marks)

- 6** Outline one limitation of introspection related to the data it produces, as identified by later critics of Wundt's method in the origins-of-psychology debate.

Outline one limitation of introspection related to the type of data it produces.

(Total for Question 6 is 2 marks)

- 7** Describe one way in which Wundt's approach used controlled conditions that resemble modern scientific practice, giving a concrete example from laboratory work at Leipzig.

Describe one way Wundt used controlled conditions that resemble modern scientific practice, with an example.

(Total for Question 7 is 3 marks)

- 8** Outline two reasons why later psychologists argued that introspection was not an adequate scientific method for studying the mind.

Outline two reasons why introspection was criticised as inadequate for scientific study of the mind.

(Total for Question 8 is 4 marks)

- 9** Explain two specific limitations of introspection as a scientific method, using examples of how these limitations affect the ability to collect reliable and objective data in Wundt-style experiments.

Explain two specific limitations of introspection as a scientific method, with examples.

(Total for Question 9 is 6 marks)

- 10** State two positive contributions Wundt's laboratory and method made to psychology becoming a science, limited to the Leipzig work itself.

State two positive contributions of Wundt's Leipzig laboratory to psychology's scientific emergence.

(Total for Question 10 is 2 marks)

- 11** Outline briefly what Wundt and his colleagues meant by analysing conscious experience into its basic elements, and give an example of such an element.

Outline the idea of analysing conscious experience into basic elements and give an example.

(Total for Question 11 is 2 marks)

- 12** Discuss the emergence of psychology as a science, using Wundt's work in the Leipzig laboratory as the starting point. In your answer, outline Wundt's contributions to scientific method and evaluate the strengths and limitations of his introspective method in establishing psychology as a scientific discipline.

Discuss the emergence of psychology as a science, using Wundt's Leipzig laboratory as the starting point. Outline contributions and evaluate strengths and limitations of introspection.

(Total for Question 12 is 16 marks)

Mark scheme · PSY.APP1 Wundt, Introspection and the Emergence of Psychology as a Science

Question 1

- **B1** identifies that Wilhelm Wundt set up the first experimental psychology laboratory in Leipzig in 1879
- **Answer: Wilhelm Wundt established the first experimental psychology laboratory in Leipzig in 1879, marking the start of psychology as a separate scientific discipline.**

Question 2

- **B1** states introspection involved trained participants describing their conscious experiences and mental processes
- **B1** states these descriptions were structured and given under controlled, standardised conditions
- **Answer: Introspection involved trained participants describing their conscious experiences and mental processes in a structured way, under controlled and standardised laboratory conditions.**

Question 3

- **B1** standardised instructions and controlled stimulus presentation oe
- **B1** use of trained observers to report immediate conscious experience rather than philosophical speculation oe
- **Answer: Examples: standardised instructions and controlled presentation of stimuli, and use of trained observers who reported immediate conscious experience.**

Question 4

- **B1** states Wundt aimed to study conscious experience empirically using measurement rather than purely logical argument
- **B1** states he introduced experimental methods and controlled conditions into the study of the mind
- **B1** states this replaced philosophical speculation with systematic observation and recording of mental events
- **Answer: Wundt aimed to study conscious experience empirically and introduced experimental methods and controlled conditions to measure mental processes, replacing philosophical speculation with systematic observation and recording.**

Question 5

- **B1** states he used standardised procedures and controlled stimuli so each observation was comparable
- **B1** or states he trained observers to describe experiences in consistent ways oe
- **Answer: He used standardised procedures and controlled stimuli, and trained observers to report experiences consistently, to improve repeatability.**

Question 6

- **B1** states introspection produced private, subjective data that cannot be independently verified by other observers
- **B1** or states the data are unreliable between observers (poor inter-observer reliability) oe
- **Answer: Introspection produced private, subjective data that could not be independently verified, leading to poor inter-observer reliability.**

Question 7

- **B1** identifies controlled conditions, e.g. stimuli presented for fixed durations or in fixed order
- **B1** explains how this allows comparison across participants oe
- **B1** gives example: using a metronome or set visual stimuli and asking trained observers to report immediate sensations
- **Answer: He used controlled conditions such as presenting stimuli for fixed durations so observers could be compared; for example, using set visual patterns or a metronome and asking trained observers to report immediate sensations.**

Question 8

- **B1** private nature of reports, meaning findings cannot be independently verified
- **B1** poor reliability between observers, with similar stimuli producing different reports from trained observers
- **B1** introspection focuses on conscious thought only, ignoring unconscious processes that scientists later regarded as important
- **B1** reports can be influenced by demand characteristics or participants trying to make their reports fit expectations
- **Answer: Possible reasons: reports were private and unverifiable; different observers often gave inconsistent accounts; introspection only accessed conscious experience not unconscious processes; and reports could be shaped by demand characteristics.**

Question 9

- **M1** identifies a limitation, e.g. subjective, private nature of introspective data
- **A1** explains why this matters: other researchers cannot check or replicate a participant's private experience, reducing verifiability and inter-observer reliability
- **M1** identifies a second limitation, e.g. variability between trained observers or influence of demand characteristics
- **A1** explains why this matters: inconsistent reports across observers make findings unreliable, and participants may report what they think the experimenter wants, reducing objectivity
- **M1** may identify a further consequence or example, e.g. failure to access unconscious processes limits the scope of conclusions
- **A1** explains the consequence: important mental processes remain unmeasured, so introspection cannot provide a complete scientific account of the mind
- **Answer: E.g. introspection yields private, subjective reports that other researchers cannot verify, so results lack independent confirmation and inter-observer reliability. Different trained observers often give inconsistent accounts and may be influenced by demand characteristics, meaning findings are unreliable and not objective. Also, introspection accesses only conscious thought, missing unconscious processes, so it cannot give a complete scientific account.**

Question 10

- **B1** introduced systematic experimental methods to study mental processes
- **B1** trained observers and standardised procedures established a model for laboratory research in psychology
- **Answer: He introduced systematic experimental methods to study mental processes, and his use of trained observers with standardised procedures established a laboratory model for psychological research.**

Question 11

- **B1** states the idea: breaking down conscious experience into basic sensations, images or feelings
- **B1** gives an example, e.g. sensation of a colour or a tone as a basic element
- **Answer: They aimed to break conscious experience into basic sensations, images or feelings, for example treating the sensation of a specific colour or a single tone as a basic element.**

Question 12

- **Level 4** (13-16): Knowledge of Wundt and introspection is detailed and accurate. Evaluation is thorough and balanced, addressing both how Wundt promoted scientific psychology and the genuine limits of introspection. There is effective, sustained use of reasoned argument and relevant examples showing the impact on psychology's emergence as a science. Answer is well organised, uses appropriate terminology and links AO1 and AO3 throughout.
- **Level 3** (9-12): Knowledge of Wundt and introspection is clear with some detail. Evaluation is present and relevant but may be less developed or slightly imbalanced. There is reasonable application of examples and some integration of strengths and limitations to the argument about psychology becoming a science.
- **Level 2** (5-8): Knowledge is basic and may lack some accuracy or detail. Evaluation is limited or descriptive rather than analytical. The answer may list strengths or limitations without fully linking them to the question about the emergence of psychology as a science.
- **Level 1** (1-4): Very limited knowledge and minimal evaluation. Answer is fragmentary, largely descriptive, or off-topic, with little or no coherent argument about psychology becoming a science.
- **Level 0** (0): No creditable content.
- **Indicative content:**
 - AO1: Wundt established the first experimental psychology laboratory in Leipzig in 1879, often seen as the formal start of psychology as a separate scientific discipline.
 - AO1: Wundt used introspection, asking trained observers to give systematic, structured reports of their conscious experiences under controlled, standardised conditions.
 - AO1: Procedural features that echoed scientific practice included controlled stimuli, standardised instructions, and training to improve consistency of reports.
 - AO1: Wundt aimed to measure mental processes empirically rather than relying on philosophical argument, providing a model for laboratory-based psychological research.
 - AO3: Strengths include creating a clear methodological example that encouraged measurement, control and replication in psychological research, and moving study of mind from speculation to empirical observation.
 - AO3: Wundt's work legitimised psychology as an academic subject with scientific aspirations and trained a generation of researchers who spread experimental methods internationally.
 - AO3: Limitations of introspection include the private, subjective nature of data which cannot be independently verified, leading to low inter-observer reliability and difficulties in replicability of findings.
 - AO3: Introspection accessed only conscious experience and could not reveal unconscious processes, limiting the scope of scientific explanation of mental life.
 - AO3: Participants' reports could be affected by demand characteristics and interpretation, and the method relied on verbal report that varied across individuals, undermining objectivity.
 - AO3: Overall evaluation might conclude Wundt was crucial in founding scientific psychology by introducing experimental method and laboratory practice, but his particular method, introspection, had significant scientific weaknesses that later researchers had to address with new methods. A balanced conclusion should weigh Wundt's foundational role against the need for methodological development for psychology to mature as a science.