Paper 1

Answers which should NOT receive credit

For evaluation points written, do NOT accept answers which state that

* **Self-selecting sampling method** is less ethnocentric (incorrect), more valid (unclear which type and why), more reliable (unclear which type and why)
* **Independent measures / repeated measures / matched pairs** experimental designs are more valid (unclear which type and why), more reliable (unclear which type and why), give more data (this is determined by the sample not the experimental design)
* **Mean** is more ‘accurate’, as all 3 measures of central tendency are accurate.
* **Mean** is more ‘scientific’, as all 3 measures of central tendency are.
* **Standard deviation** is more ‘accurate’, as all 3 measures of dispersion are accurate.
* **Standard deviation** is more ‘scientific’, as all 3 measures of dispersion are.
* **Correlations** are
	+ more valid (unclear which type & why)
	+ more reliable (unclear which type & why)
	+ give more data (this is determined by the data set not the research method)
	+ **Correlations** can be plotted onto a graph (any data set can be).
	+ **Correlations** are easy to analyse / interpret (lack of comparison or explanation to show why this is a strength)

**Multiple Responses**

λ

Where a question asks for ONE / TWO strengths / weaknesses, and more than this number are given,

* Mark the first one / two depending on the question,
* Add the lamda symbol into the text λ
* Ignore any further part of the answer which is also a strength / weakness.
* When marking on screen, this further part should be highlighted.

Section A: Multiple Choice

|  |  |  |
| --- | --- | --- |
| **Question number** | **Question Focus** | **Answer** |
|  | Coding Frame | A |
|  | Quasi experiment: IV is not manipulated | D |
|  | Naturalistic observation | B |
|  | Significant figures | C |
|  | Ratios  | B |
|  | Calculating the median | C |
|  | Standard form | B |
|  | Nominal data | A |
|  | Variance = measure of dispersion  | B |
|  | Significance at the 5% level of probability | B |
|  | Type 1 error  | D |
|  | Sections of a practical report | B |
|  | Peer review | A |
|  | Non-parametric inferential statistical test | A |
|  | Stats tests without ranking: Chi-squared | A |
|  | Correlation co-efficient | D |
|  | Chi squared / Mann Whitney | B/C |
|  | Bandura: time sampling | D |
|  | Bocchiaro: sampling method | C |
|  | Independent groups in Loftus & Palmer’s  | D |

Section B: Research design and response

21. Participants for the study will be obtained by putting up a poster on a notice board in a large local supermarket asking for volunteers for a study investigating factors influencing memory. What type of sampling technique is this? [1]

Self-selecting / selected / volunteer

22. Explain 1 strength & 1 weakness of using this sampling technique in this study. [4]

**How the marks are awarded for each evaluation point:**

* 1st mark: accurate strength / weakness is stated
* 2nd mark: and explained using a value judgement
* 3rd mark: in the context of this study (context words = ‘supermarket’, ‘shopping’, ‘memory’, ‘colour of words’, ‘green’)

**Examples of evaluation points**

**Strengths:**

* relatively easy to obtain a potentially diverse group of participants;
* cost effective
* can include specific details of type of participants desired.

**Weaknesses:**

* prone to (volunteer) bias
* limited to those shopping in the chosen supermarket at the time

**Example for 1 mark**

Only weirdoes will volunteer.

23. Write a one-tailed alternative hypothesis for this study. [3]

**How the marks are awarded:**

* 1 mark: one tailed hypothesis
* 1 mark: IV accurately operationalized
* 1 mark: DV accurately operationalized

**Examples for 3 marks**

* There will be a significant difference in the number of words correctly remembered with more words printed in green ink being remembered than those printed in black ink
* More words presented for learning printed in green ink will be remembered than words presented in black ink.

**Example for 2 marks**

* More words presented for learning printed in green ink will be remembered (IV not fully operationalized)

**Example for 1 mark**

* Green ink will improve memory recall.

24\* Explain how you would conduct a study using the laboratory experiment method to investigate the effect of colour on memory for a list of words. Justify your decisions as part of your explanation. You must refer to:

* the use of independent measures design or repeated measures design;
* how the variables are operationalized;
* at least two control features;
* level of data collected.

You should use your own experience of carrying out an experiment to inform your response. [15]

Annotate with F / E / C / J / O and their number, e.g. C1, J4.

Annotation Page

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Feature | Explained | In context | Justified  | Own Research |
| independent or repeated measures design;  |  |  |  |  |  |
| how the variables are operationalized;  |  |  |  |  |  |
|  |  |  |  |
| at least two control features;  |  |  |  |  |  |
|  |  |  |  |
| level of data collected. |  |  |  |  |  |

Level 4 = 12-15 marks

* All 4 required features are addressed
* Accurate knowledge of each **choice** is demonstrated (C)
* **Application** to this scenario is demonstrated in relation to each choice (A)
* Appropriate **justification** of all or most techniques is demonstrated (J)
* Response explicitly draws on the candidates own **research** (R)
* The answer has **sufficient coherence and detail** to allow for replication.

Level 3 = 8-11 marks = reasonable

Level 2 = 4-7 marks = limited

Level 1 = 1-3 marks = basic

25. State **one** open question that could provide additional information in the form of qualitative data for use **in this study**. [2]

**How the marks are awarded**

2 marks: Correct style of question, in context (context words: memory)

1 mark: Correct style of question

0 marks: Any question which refers to colour

**Example for 2 marks**

Explain what kind of things case you the most problems with your memory?

26. Outline one strength of having some qualitative data **in this study** on memory. [3]

**How the marks are awarded for each evaluation point:**

* 1st mark: accurate strength / weakness is stated
* 2nd mark: and explained using a value judgement
* 3rd mark: in the context of this study (context words = ‘memory’, ‘remember’)

**Examples of evaluation points**

* Provides depth/detail/insight;
* enables the subjective concept to be investigated,
* increased validity due to participants being able to express their views/thoughts/feelings, etc.

27. State one question using a semantic differential scale that could be used **in this study**. [2]

**How the marks are awarded**

2 marks: Correct style of question, in context (context words: memory)

1 mark: Correct style of question

0 marks: Any question which refers to colour / uses a Likert scale

Example for 2 marks

Mark on this line where you consider yourself to be:

Forgetful --------------------------------------------------------------------------------Strong memory recall

28. Explain one way in which this self-report on memory can be designed to increase the generalisability of the findings **from this study**. [3]

**How the marks are awarded for each evaluation point:**

* 1st mark: strategy
* 2nd mark: explained in enough detail to allow for replication
* 3rd mark: in the context of this study (context words = ‘memory’, ‘remember’)

**Examples of strategies which could be raised**

* increasing sample size;
* increasing sample diversity;
* use of random sampling;
* improving the ecological validity of the environment of the study;
* improving the mundane realism of the task, etc.

Section C: Data analysis and interpretation

29. What level of data is obtained in this study? [1]

Interval

30. What is the ratio of participant C’s Maths to his Physics test scores? [1]

1:4

**No marks for**

* ratio not simplified (6:24)
* reversed ratio (4:1)

31. What is the mode for the Physics test scores? [1]

24

32. Suggest one advantage of using mean instead of the mode to analyse the data from the test scores. [3]

**How the marks are awarded:**

* 3 marks = advantage (P) clearly explained (E) in context (C)
* 2 marks = advantage (P) explained (E) without context or advantage stated (P) in context (C)
* 1 mark = advantage (P) stated but not in context (C)

The mean will allow all of the data to be taken into consideration (P), allowing it to be more reflective / representative (E) of the **Maths / Physics test** scores (C) for each of the subjects.

33. Calculate the range for each test taken. [2]

Maths test: 28 - 4 = **24** OR (28 - 4) + 1 = **25**

Physics test: 30 - 7 = **23** OR (30 - 7) + 1 = **24**

34. What conclusion can be reached by interpreting the range for each test? [4]

**Examples for 4 marks**

* The ranges are very similar (24 and 23) indicating that the variation in individual performances in the tests is very similar for both the Maths & Physics test (suggesting people who are good at maths are also good at physics and vice versa)
* The range for the maths scores is quite large (24) indicating there is a big variation in individuals maths ability, with some scoring very high and others very low on the test; the range for the physics scores is quite large (23) indicating there is a big variation in individuals maths ability, with some scoring very high and others very low on the test.

35. Suggest one advantage of using standard deviation instead of the range to analyse the data from each test. [3]

**How the marks are awarded:**

* 3 marks = advantage (P) clearly explained (E) in context (C)
* 2 marks = advantage (P) clearly explained (E) without context or advantage stated (P) in context (C)
* 1 mark = advantage (P) stated but not in context (C)

**Example for 3 marks**

The ranges here are quite similar, both being influenced by anomalies (P), as it only considers the highest and lowest values (E). Whereas the standard deviations take into account how spread about the mean all of the test scores are, which allows for inferences about the reliability of the Maths & Physics (c) to be made.

36. Draw a scatter diagram displaying the results of this study. [4]

**How the marks are awarded**

* 1 mark: correctly plotting the data
* 1 mark: including units of measurement on both axes
* 1 mark: clear labelling of each axis
* 1 mark: clear and appropriate title

(GATS – Graph, Axes, Title, Scale)

37. Outline **one** strength and **one** weakness of using correlation **in this study**. [6]

**How the marks are awarded for each evaluation point:**

* 1st mark: accurate point is outlined
* 2nd mark: in the context (context words = test scores (both words needed for it to be unique to this study), Maths, Physics, GCSE)

**Examples of advantages**

* Quick / easy / useful preliminary research technique, allowing researchers to identify a link between Maths & Physics that can be further investigated
* Can be used to research topics that are sensitive/ otherwise would be unethical, as no variables are manipulated
* Deliberate manipulation of covariables (Maths & Physics) might be unethical or could put the Ps under undue stress.

**Examples of disadvantages**

* does not show cause-and-effect between the ability to perform well in Maths & physics;
* relationships could occur by chance;
* extraneous variables may be responsible for performance in Maths & Physics (e.g. completing puzzles etc.);
* only deals with quantitative data so unable to know why those who do well in maths also do well in physics

38. Explain **one** reason why Spearman’s Rho would be the appropriate non-parametric inferential statistical test to use to analyse the data **from this study**. [2]

**How the marks are awarded:**

**1st mark: for an accurate reason for the choice of statistical test**

* Test of relationship / correlation
* Independent measures
* Interval data

2nd mark: for reference to context to illustrate the point given

* Just looking at the Maths and Physics scores
* The tests were only taken once
* The Maths and Physics scores are interval data

39. Using the table of critical values, what is the critical value for use with the Spearman’s Rho test **in this study** at the 5% level of probability? Present your answer to 2 significant figures. [2]

* 1 mark for identification of the correct critical value = 0.738 (This can be by circling the correct value on the table of critical values)
* 1 mark for being presented to 2 significant figures 0.74

40. After carrying out a Spearman’s Rho inferential statistical test the calculated value obtained was rs = +0.7066. Explain what this means. [3]

* 1 mark for stating that the correlation is POSITIVE
* 1 mark for stating that the correlation is STRONG
* 1 mark for stating that the correlation was between Maths and Physics scores

41. Using the calculated value (0.7066) and critical value (identified in question 39), write a significance statement stating whether or not the results are significant at the 5% level of probability. [3]

1 mark for each of the following to a maximum of 3

* not significant
* at probability set at 5% because
* the calculated value 0.7066 was
* smaller than the critical value 0.74
* when in Spearman’s this should be the opposite way around
* so the null hypothesis should be accepted
* and the directional hypothesis rejected

Paper 2

A: Core Studies

1a. From Milgram: Describe how obedience was measured [2]

* 1 mark - the measurement was through observation (HOW)
* 1 mark – the maximum shock level given (WHAT)

**Examples for 2 marks**

* Observers noted down the maximum shock P administered before they refused to go any further or the study ended
* The experimenter and observers watched and noted the highest shock level (between 15 – 450 volts) given by each participant

**Examples for 1 mark**

* How far the participants shocked
* How many volts they went up to

1b. Outline one problem with measuring obedience in this way. [2]

**How the marks are awarded**

* 1st mark: a correct problem identified about the way obedience was measured (observer bias, demand characteristics, observers may miss behaviours)
* 2nd mark for development of the problem in context.

**Examples for 2 marks**

* The participants knew they were being observed so their behaviour may not be as it normally would be. For example, the participants in Milgram’s study may have administered more electric shocks because they knew they were being observed

**Examples for 1 mark**

* Observers may ‘see’ what they expect (expectation bias)
* Observers may miss behaviours
* If the participant knows they are being observed they behave in a way they think the researchers want them to behave so they will not show genuine/natural behaviour
* If the participant knows they are being observed they respond in a socially desirable way rather than showing normal behaviour

2a. From Bocchiaro’s study: Identify one dependent variable. [1]

* Obeying / Disobeying
* Blowing the whistle (on the experimenter)
* Scores on HEXACO-PI-R and / or, Decomposed Games

2b. From Bocchiaro: Describe 1 finding that demonstrates that those participants who obeyed did so because of external forces.[2]

**How the marks are awarded**

* 1 mark – finding (not a conclusion *– findings are often facts and conclusions are often consequences of the findings*)
* 1 mark – reference to external forces (e.g. experimenter)

**Examples for 2 marks**

* 76.5% / 114 / majority obeyed the experimenter
* 14.1% / 21 / minority disobeyed the experimenter

**Examples for 1 mark**

* 76.5% / 114 / majority obeyed
* The majority obeyed because they were confused (internal forces, not external)

**Examples for 0 marks**

* They did not want to be known by other people as a whistleblower (inference / conclusion, not a finding)
* People obey authority, even if they are unjust (conclusion)
* What people say they will do in a given situation is not what actually happens (conclusion)

3. From Bandura et al.’s study into the transmission of aggression, describe **how** observation was used in this study. [4]

**Possible features of observation;**

* use of structured observation through behavioural categories – imitative aggression, partially imitative aggression, non-imitative physical and verbal aggression, non-aggressive behaviour
* categories tallied providing quantitative data
* use of covert observation through one way mirror
* time sampling – responses recorded every 5 secs for 20 mins
* two observers used
* non-participant observation
* controlled observation

**How the marks are awarded**

4 marks: Accuracy and detail, including one behavioural category

3 marks: Generally accurate and detailed

2 marks: some accuracy / detail, no specific reference to details of Bandura’s study

1 mark: accuracy or detail on the observational method.

**Example for 4 marks**

The observers rated the child’s behaviour in terms of pre-determined response categories (event sampling) [1] whilst sitting in an adjoining observation room and watching the child through a one-way mirror [2] (recordings also taken to observe at a later time). Responses were recorded every 5 seconds for 20 minutes (time sampling) [3] in the following categories and provided an aggression score as tallies were added up at the end of the observation: imitative, partially imitative, non-imitative aggression and non-aggressive behaviour [4]

**Example for 3 marks**

Two observers observed behaviour every 5 seconds for 20 minutes in the following categories: Imitative aggression (physical, verbal and non-aggressive speech), partially imitative aggression, non-imitative physical and verbal aggression and non-aggressive behaviour.

**Examples for 2 marks**

* Observers watched the children through a one-way mirror every 5 seconds for 20 minutes.
* Bandura used an observation which was covert, structured, non-participant observation and produced quantitative data.

**Examples for 1 mark**

* observers watched the children through a one-way mirror
* covert, controlled observation was used.

4. In the study by Chaney et al, data on the children’s attitudes towards the Funhaler device were collected. The children’s attitudes were more positive than for the conventional spacer. Identify **one** of the six children’s attitudes listed in the questionnaires. [1]

1 mark for any of following:

* pleasure
* acceptance
* mild fear / dislike
* strong fear / dislike
* panic or phobia
* suspicion

5. To what extent does Chaney et al.’s contemporary study **change** our understanding of the key theme of ‘the external influences on children’s behaviour’? Support your answer with examples from both Bandura et al’s and Chaney et al.’s studies. [5]

**How the marks are awarded**

* 1 mark: Comparative judgment
* 1 mark: Relating the tagline (external influences on children’s behaviour) to the classic study
* 1 mark: for evidence related to Bandura
* 1 mark: Relating the tagline (external influences on children’s behaviour) to the contemporary study.
* 1 mark: for evidence related to Bandura

**Examples for 5 marks**

* Chaney’s study significantly [1] changes our understanding of the external influences on children’s behaviour and shows that children can be encouraged to adhere to their medication with the use of ‘fun’ [2] (operant conditioning using rewards and positive reinforcement) [3], not just social learning seen in Bandura’s study which shows that children’s behaviour is shaped by the adult role models [4] they interact with and therefore children acquire behaviour through observation [5].
* Chaney’s study does not significantly [1] change our understanding because it shows that children can be encouraged to adhere to their medication with the use of ‘fun’ [2] (using operant conditioning by being rewarded) [3], and this is learning in the same way that social learning is seen in Bandura’s study which shows that children’s behaviour is shaped by the adult role models they interact with [4] and therefore children acquire behaviour through observation [5].

6. Outline **how** Grant et al.’s study on context-dependent memory links to key theme of ‘Memory’. [3]

**How the marks are awarded**

* 1 mark: understanding the key theme
* 1 mark: explaining how the study shows this
* 1 mark: giving evidence of this theme from the study

**Examples for 3 marks**

* The key theme of memory considers the extent to which our memory produces an accurate record of the material encoded [1] Grant’s study links to this theme as it assessed the enhancing effects of contextual cues [1] during the process of encoding and retrieval, if they matched or not [1].
* The key theme looks at things that affect our memories [1] and Grant looks at how our memory recall can be enhanced [1] by matching the conditions [1] with the learning.

7. From Sperry’s ‘split brain’ study into the psychological effects of hemisphere deconnection, explain **why** visual information had to be presented for a restricted period of time in the visual tasks. [2]

**How the marks are awarded**

**2 marks –** Accuracy (visual field, hemisphere)

**1 mark –** Partial (so that each hemisphere did not receive the information at the same time)

**0 marks –** Any reference to ‘EYE’ without reference to VF

**Example for 2 marks**

If the information was shown for any longer (than 1/10th a second) both visual fields would be able to see the information at the same time which means information would be passed to both the left and right hemispheres at the same time and no difficulties in identifying objects to the left visual field would be apparent.

8. From Casey et al.’s study on delay gratification, explain **one** strength of the research method used in this study. [2]

Casey’s study was a natural experiment.

* 1 mark for a stated strength of natural experiments (e.g. ecological validity)
* 1 mark for reference to Casey.

**Example for 2 marks**

A strength of here is that it is high in ecological validity. As the independent variable *(whether the participant was a high delayer or a low delayer)* was naturally occurring the performance on the impulse control task should represent the adults naturally occurring/their normal impulse control behaviour.

9. Outline **one** similarity and **one** difference between Sperry’s ‘split brain’ study and Casey et al.’s study on delay gratification. [6]

**How the marks are awarded**

* 1 mark: Suitable similarity stated
* 1 mark: Detail from Sperry’s study to support this similarity
* 1 mark: Detail from Casey’s study to support this similarity
* 1 mark: Suitable difference is stated
* 1 mark: Detail from Sperry’s study to support this difference
* 1 mark: Detail from Casey’s study to support this difference

**Examples of similarities**

* Natural experiment
* Volunteer sample
* Use of equipment
* Ethnocentric
* Focuses on localisation of function

Examples of differences

* Time frame of the research = Snapshot (Sperry) longitudinal (Casey)
* Size of samples= idiographic (Sperry), nomothetic (Casey)
* Area of focus when considering localisation of function focus = broad (Sperry) and small (Casey)
* Temporal validity = classic (Sperry), contemporary (Casey)

Acceptable, but will be difficult to explain fully.

* Area: Biological: Behaviour is caused by brain (structure / activity), chemicals (hormones / neurotransmitters) and genes
* Key Theme: Regions of the brain: Which behaviours different regions of the brain control

10. Outline **one** reason why Freud’s Little Hans study may be considered invalid. [3]

**How the marks are awarded**

**Up to 2 marks –** understanding of validity

**Up to 2 marks –** answers supported with reference to Little Hans

Answers that refer to reliability should not be credited

**Types of validity**

* Internal
* Face
* Construct
* Concurrent
* Criterion
* External
* Population
* Ecological

**Examples of 3 marks**

* Hans was not a normal child [1], so differed from other children [1], so generalisation to the target population is invalid [1]
* The research was based on information from Hans’s father [1] who was aware of Freud’s theoretical views [1], so could not have been objective [1].

11. Describe **one** finding that shows a difference in performance on the ‘Eyes Task’ between the conditions. [2]

**How the marks are awarded**

* 1 mark for a description of the finding (more / less / impaired)
* 1 mark for selecting the quantitative data to fit the finding

**Examples for 2 marks**

* Participants in the Autistic / AS conditions were **impaired** on the Eyes Task compared to “normal” adults scoring 16.3/25 and 20.3/25 respectively
* Participants in the Autistic / AS scored 16.3 on the Eyes task, the **lowest** compared to all other conditions

Section B: Areas, Perspectives and Debates

12. Outline two principles or concepts of the Developmental area. [4]

**Two of the following:**

* Change and development is an on-going process which continues throughout our lifetime.
* Behaviour may be learned (nurture) or innate (nature)
* Behaviour is a consequence of age and/or experience.
* Early experiences affect later development.
* Development may happen in pre-determined stages.

13. Outline how Chaney’s study links to the Developmental area. Support your answer with evidence from this research. [4]

**Examples of links which could be drawn out**

* Developmental because it shows that children develop and learn through operant conditioning.
* Children learn through rewards and negative reinforcement.
* The Funhaler was rewarding to use which increased the child’s compliance.

**Example for 4 marks**

Chaney et al.’s study shows that behaviour can develop through the process of operant conditioning [1] where individuals repeat behaviours [1] that have led to pleasant consequences. [1] Adherence to asthma medication was improved because the use of the ‘Funhaler’ produced pleasant consequences which acted as behavioural reinforcement. [1]

14. Outline **one** reason why conducting socially sensitive research is important. Support your answer with evidence from one appropriate core study. [4]

Answers that refer to a key study (research for Paper 3) should not be credited

**Examples of reasons**

* Ignoring the topics is abandoning our ‘social responsibilities’
* It sometimes studies unusual behaviour which is beneficial in establishing abnormality from normality
* Can establish patterns of behaviour that could prevent future atrocities / immoral acts
* Not all socially sensitive research is controversial (e.g. Sperry)
* Some socially sensitive research is beneficial to society (e.g. Loftus and Palmer)
* Often socially sensitive research is used positively to challenge discrimination against groups of people
* Practical applications
* Gather findings that are not obtainable in a less socially sensitive way
* Gain valuable insight into human behaviour as it often investigates highly personal or private experiences

**Example for 4 marks**

It is important to do socially sensitive research so that a better knowledge of behaviour is gained. [1] By ignoring a sensitive area, psychologists are being irresponsible and not thinking through the implications if the area is not studied. [1] For example, Casey’s natural experiment is socially sensitive as it could lead to issues of discrimination (against low delayers) [1] but was important to research to show how the behaviour is due to lack of activity in the frontal lobe. [1]

15. Compare how the Reductionism debate is **similar** to the Deterministic debate. Support your answer with evidence from core studies. [8]

**How the marks are awarded**

1 mark each for the following, to a maximum of 8 marks

* a similarity is identified
* discussed / elaborated
* and supported by evidence of reductionism
* and supported by evidence of determinism

**Examples of similarities which could be referred to:**

* Assume behaviour is predictable
* Collect quantitative, interval data collected
* Ethnocentric
* Lead to quick / easy conclusions / interventions
* Take a scientific approach / use scientific methodology

**Example for 8 marks**

They both assume that behaviour is predictable. [1] Behaviour is not spontaneous or random but will happen dependent on specific causes. [1] Determinism believes that behaviour is determined or definitely likely to happen based on a specific cause, e.g. obedience will occur when there is an authority figure taking responsibility for the person’s actions in Milgram’s study. [1] Reductionism believes that cause of behaviour can be reduced to specific explanations, such as a commisurotomy, which predict exactly what behaviour will be shown. Sperry’s research shows that severing the corpus callosum can predict people’s visual and tactile behaviour. [1]

They both take a scientific approach to explain human behaviour [1] by isolating specific variables which cause behaviour through experiments / the use of scientific equipment. [1] Using a natural experiment which allowed for the isolation of one IV (commisurotomy), Sperry’s research is deterministic as it shows that different functions are located within certain areas of the brain and that these cause behaviour [1]. Likewise, isolating the community variables, such as simpatia and pace of life, Levine’s reductionist study focuses on a scientific, experiment led approach to research [1].

16. Discuss the usefulness of conducting research which is considered reductionist. (15) Use examples from appropriate core studies to support your answer.

The answer requires:

* Understanding of reductionism
* Understanding of usefulness
* 3 evaluation points
* Which are explained and discussed
* Substantiated by at least 2 core studies
* With consistent use of psychological terminology
* Showing a line of reasoning / clear and logically structure
* In which everything is relevant
* No core studies = capped at 3 marks.
* If the answer is completely study led = capped at 3 marks

**Example for 15 marks**

A reductionist approach is very useful because it promises to give simple answers to difficult questions. This helps our understanding of an issue. It is a characteristic of the way people usually consider the cause of anything that happens (WWII was caused by Treaty of Versailles). Whilst we know that it is going to be a range of causes (Treaty of Versailles, failure of the League of Nations, policy of appeasement, etc.), we often want to be able to say that one thing happens because of a single cause. For example, by reducing autism to a single explanation, (lacking a Theory of Mind), Baron Cohen’s research helps our understanding of this disorder from the simplest factor. However, this is a description of the disorder, rather than an explanation of its cause, which means that our knowledge and understanding may not lead to prevention of autism.

On the other hand, reductionist research is useful because it leads to the development of therapies / treatments and interventions of a variety of behaviours. Reductionist research is helpful because it can be used to change behaviour. Loftus and Palmer showed that memory can be distorted by post event information. This is useful as the research can be used by the police to ensure that witness interviews do not include leading questions. Reductionist research allows for generally effective interventions which will benefit a wide range of people. However, any intervention will not be totally effective as it fails to represent the true complexity of behaviour, such as why memories can easily be distorted.

Reductionist research can focuses in on a problem and isolates the variables which are having an effect. This is useful because it progresses our understanding of behaviour. For example Levine’s natural experiment allowed the cause of helping behaviour to be reduced to a number of community variables, such as *simpatia* and pace of life. These 2 variables had never been considered before, so our understanding of behaviour and Psychology has increased because of his attempts to reduce the complex behaviour into individual factors.

Section C: Practical Applications

17. Identify one psychological issue raised by the above source. Support your answer with evidence from the source. [3]

**Examples of issues which could be raised:**

* Leading questions can distort memory
* Leading questions suggest the desired answer to the witness
* Leading questions can bias a witness’s response
* The witness followed the lead given by the interviewer

**How the marks are awarded**

1 mark for an appropriate issue

2 marks for supportive evidence from the article

**Example for 3 marks**

Leading questions can distort memory [1] When the interviewer asks "As you approached the end of the road, you were looking at the traffic light, weren't you?" [1] The witness responds yes as the question suggests this is the only appropriate answer. [1]

18. Explain how the source is relevant to the cognitive area of psychology. Support your answer with evidence. [4]

**How the marks are awarded**

2 mark for understanding of the principles of the cognitive area

2 marks for support by evidence from the article

*The cognitive area believes internal mental processes are important factors influencing human behaviour. [1]* The source can is relevant to the cognitive area because it shows how leading questions can bias a certain response from a witness. [1] *Memory is an example of an internal mental process and witnesses, when asked to recall events can have their memory distorted through the use of leading questions. [1]* The witness here may not truly remember the speed the car was travelling at but because the question asked “was it travelling over 40mph?” it could have distorted the witness’s memory of the event. [1]

19. Briefly outline **one** piece of psychological research that links to the above source and justify how it relates to the above source. [8]

**How the marks are awarded**

5 marks for an outline of one piece of research – this can be a Core Study, a Key Study or any recognizable piece of research

3 marks for evidence from the article

**Example for 8 marks**

Loftus and Palmer investigated whether post-event information could distort memory. In their 1st lab experiment, 45 participants gained through opportunity sampling at the Uni of Washington were split into 5 groups using an independent measures design (1 group per each conditions of the IV). They watched video of a car crash and then asked to record their answer to the critical question. IV was 1 of 5 verbs used in the critical question (About how fast were the cars going when they \_\_\_\_\_\_ each other?). The DV was their estimate of speed which was collected by written self-report. The results showed that the verb ‘smashed’ had the highest speed estimated (smashed - 40.8mph) and the verb ‘contacted’ had the lowest (31.8mph). It was concluded that the more intense the verb, the higher speed estimate. This shows that memory is made up of 2 elements - information from the scene and information supplied afterwards.

This relates to the source because both include questioning of witnesses to car accidents: in Loftus’s study, questioning on the estimated speed, here when the interviewer questions the victim. This also relates to this source because leading questions asked: here each of the questions is rhetorical and in Loftus’ second study the intensity of the verb determined whether the participant saw broken glass. Lastly, this source relates to Loftus’ study as both ask for quantitative, interval data to be recorded in the form of miles per hour. In Loftus’s study, this is by a written self-report and in this source it is by a verbal self-report.

20. Explain one reason why leading questions should **not** be asked during an interview with a witness. Justify your answer. [3]

**How the marks are awarded**

1 mark for an appropriate reason

2 marks for a developed justification

**Examples of reasons:**

* Reduce accuracy of witness statements
* Reduce validity of witness statements
* Could lead to false perceptions being formed of someone which are untrue
* Could lead to false memories being created
* Could lead to false confessions
* Could seem coercive to the interviewee
* Could make interviewee feel uncomfortable
* Could make interviewee lie
* Could bias the responses given
* They deprive respondents of the chance to articulate their experiences in their own terms

**Examples of justifications**

* Could lead to a wrongful conviction if the evidence is taken to court
* Could lead to an innocent person being arrested for a crime they did not commit
* Could lead to a person facing negative reactions in society / amongst friends / family if they are innocent yet implicated because of false evidence
* Could lead to unfair immoral / unethical reactions from others to the accused if the leading question implicates false guilt
* If the questions contain false statements about what happened, the witness incorrectly remembers the event to match the questions
* Leading questions mean the account given by the witness is being directed to what the interviewer thinks is the truth, which may not be correct
* They tend to prevent the conversation from going in an unwanted direction so other lines of questioning which could be useful are not explored

21. Explain one reason why leading questions **should** be asked during an interview with a witness. Justify your answer. [3]

**How the marks are awarded**

1 mark for an appropriate reason

2 marks for a developed justification

**Examples of reasons:**

* Questions are clear/unambiguous
* Questions can easily be repeated in the future
* Specific bits of information can be asked for
* If the question is clear the answer should be clear
* Some witnesses may struggle to remember any information so a direct question may help them remember the event

**Examples of justifications**

* Could lead to specific information being gathered that secures a conviction of an offender
* It is difficult to interpret the question differently over time so the response given by the witness should be more reliable
* The witness may be able to remember more detailed information if the questioning is targeted which could lead to the arrest of an offender
* They tend to prevent the conversation from going in an unwanted direction which would be irrelevant to the witness statement

22. Design an ethical questionnaire you could give to the witness that does not include leading questions. You must have at least three questions in your questionnaire. [4]

**How the marks are awarded**

1 mark for each for appropriate question, which is relevant to the source and is not a leading question; maximum of 3 marks

1 mark for informed consent / debrief / right to withdraw

**Example for 4 marks:**

If you find any of the following questions upsetting then please do not feel obliged to answer.

Please answer the following questions:

1. Describe the accident in your own words.
2. Draw a diagram of the accident
3. Describe how you felt after the accident.
4. Estimate the speed at which the other car was travelling

Signature of consent:

23. Evaluate the questionnaire you designed in question 22. Support your answer with reference to issue(s) and / or debate(s). [10]

**How the marks are awarded**

Levels based marking acknowledging that the evaluation is

1. **coherently** presented
2. uses of psychological terminology
3. within a well-developed **line of reasoning**
4. and **covers** 2+ evaluation points
5. which are in **context.**

**Examples of evaluation points**

* Usefulness
* Appropriateness
* Time constraints
* Reliability
* Validity
* Social desirability
* Lack of specific details needed to provide a full account
* Hard to compare / analyse results gathered
* Limited information will be gathered
* If they are able to not answer (for ethical reasons) then no information may be gathered
* Participants may not write enough information to gather an accurate account

**Example for 10 marks**

One strength of my questionnaire is that is likely to produce a less biased and distorted account of the traffic incident. As the victim is asked open ended questions such as “Describe how you felt after the accident?” they will be less likely to change their true feelings because the question itself just not predispose them to a desired answer, this should also reduce social desirability bias as they will feel less pressure to provide an answer that they believe is the desired one. This should improve the validity of the data gathered from the victim.

However a weakness of my questionnaire is that the questions are quite broad in nature and may not gather enough specific information about the incident from the victim. By asking “Describe the accident in your own words” the victim may only write a couple of sentences which would not be enough information to gather an accurate view of the incident. Although the question is not leading, more specific follow up conversations may be needed to get a useful and relevant account of the incident, which may go against the benefit of asking such an open question to begin with.

Also, by making the questionnaire ethical and allowing participants not to answer the question about the incident if they do not want to, could also limit the amount of information that could be gathered from the questionnaire.

Paper 3

Section A: Issues in mental health

Question 1: Outline one historical treatment of mental illness. [2]

* 1 mark for an **historical treatment** (e.g. trepanning)
* 1 mark for a statement of how this **treats** mental illness (e.g. to release demons from the skull).

**Example for 2 marks**

Trepanning [1] helped to release the demon from the skull [1]

**Example for 1 mark**

ECT is an historical treatment using electricity for people with depression *[2nd mark not present – no link to mental illness made]*

**Example for 0 marks**

Mental illness is caused by irrational thinking or cognitions and can be treated with CBT *[not an historical view and no link to mental illness made, such as depression]*

Question 2: Outline one way of defining abnormality. [2]

The 2 marks of the question relate to its 2 focuses:

* 1 mark for a **definition** (e.g. failure to function adequately, statistical infrequency, deviation from ideal mental health, deviation from social norms)
* 1 mark for a statement of how this explains / describes / accounts for **abnormality**

**Example for 2 marks**

Failure to function adequately such as behaving in a way that causes observer discomfort.

**Example for 1 mark**

Deviation from social norms – acting in an unusual way. *[The explanation refers to statistical infrequency, rather than the definition given.]*

***Example for 0 marks***

A person is behaving in an abnormal way, it does not follow our norms. *[No definition and the development is not specific to a way of defining abnormality in Psychology.]*

Question 3: To what extent is the key research by Rosenhan (1973) ethnocentric? [10]

**Definition**

* Ethnocentrism means using one’s own culture as the benchmark to judge the behaviour of those in other cultures
* It means psychologists ignoring the views, values, language or culture of another society when doing research / interpreting findings
* The predominant view in Psychology has been white, male and mainly from the USA so creating bias towards other groups who have different values

**Points which could be raised**

Rosenhan’s research was ethnocentric as:

* It was conducted only in a small number of USA states / hospitals
* Conducted in the USA where healthcare is not universal or free
* The pseudo-patients were mainly white, middle class, Jewish / Christian men
* The diagnosis tool used (DSM-III) was based on the signs and symptoms of white American men’s experiences.

Rosenhan’s research was not ethnocentric because:

* There was a range of types of hospitals used (fee paying / free healthcare).

Up to 2 marks for each of the following:

* AO3 Discussion (e.g. point - explanation - example - conclusion – challenge)
* AO1 Good use of psychological terminology (e.g. hard / soft ethnocentrism, emic / etic)
* AO3 Line of reasoning which is clear and logically structured (e.g. 2 paragraphs, use of conclusions and challenge points at the end of each)
* AO3 Range (two or more) of appropriate evaluation points are considered
* AO2 Context: the evaluation points are supported by relevant evidence from Rosenhan’s study (e.g. diagnosis, pseudo-patients, hospitals, USA, states).

Question 4: Outline the behaviourist explanation of mental illness. [5]

**To achieve any marks, the answer MUST refer to a named mental illness (e.g. phobias, depression). Fear, aggression and crime are not mental illnesses.**

There are 2 focuses in the question and both must be addressed:

* The **behaviourist** explanation (up to 3 marks)
	+ Behaviour is learnt
	+ Through classical conditioning, operant conditioning and / or social learning
	+ The behaviourist explanation also considers that what is learned can be unlearned
	+ Learning makes behaviour due to nurture not nature, situational not individual
* How this explains / accounts for **mental illness** (up to 3 marks)
	+ mental illnesses can be learnt through classical conditioning, when a person associates a negative experience with a particular thing / situation and develops a phobia
	+ a phobia could be maintained through operant conditioning as they can gain negative reinforcement for avoiding the thing / situation which makes them anxious
	+ also a person may learn to be phobic or be depressed through observation of others and imitation of them.

Question 5: Discuss one strength and one weakness of the behaviourist explanation of mental illness. [6]

**How the marks are awarded for each evaluation point:**

* 1st mark: accurate point is stated
* 2nd mark: and explained using a value judgement
* 3rd mark: in the context of mental illness

Where the answer is generic (not discussed in relation to mental illness and the answer could be applied to crime, child development, sport, etc.), the answer must be capped at a maximum of 4 marks.

**Examples of points which could be raised: Strengths**

* Research it is based on is scientific
* Research it is based on produces quantitative data
* Useful – lots of practical applications in unlearning the behaviour
* Allocates no blame to the person suffering the mental illness

**Examples of points which could be raised: Weaknesses**

* Reductionist - ignores other causes of behaviour
* Usually studied through experiments which may lack mundane realism and ecological validity
* Usually studied through experiments based on animals, which have less conscious thought.

Question 6: Discuss the extent to which non-biological treatment is ethical. [10]

The BPS’s 4 ethical principles are: respect, integrity, competence, responsibility. The 6 ethical guidelines are: informed consent, confidentiality, avoidance of deception, right to withdraw, debrief, protection from harm.

Up to 2 marks for each of the following:

* A good discussion (e.g. point - explanation - example - conclusion – challenge)
* Good use of psychological terminology (e.g. protection from harm, respect)
* Line of reasoning which is clear and logically structured (e.g. 2 paragraphs, use of conclusions and challenge points at the end of each)
* Knowledge of 1 or more non-biological treatments (CBT, flooding, psychoanalysis).
* The evaluation points are **supported** by relevant evidence / examples of mental illness.

**Examples of points which can be raised**

* Non-biological treatments are usually curative (rather tha palliative) which means that the principle of responsibility is upheld
* Flooding is so traumatic, it causes harm
* CBT is available on the NHS and requires informed consent to be undertaken
* Flooding is so traumatic, true informed consent is not possible.

NB.

1. Discussing how a biological treatment is unethical, does not make a non-biological treatment ethical (arguing against the opposite)
2. Cap at 0 marks when there is no mention of a named non-biological treatment
3. Cap at 0 marks where biological treatments (e.g. ECT) are discussed

Section B: Option 1: Child Psychology

Question 7a: Explain how the research by Wood et al (1976) could be used to improve children’s learning in an educational setting.

**How the question is marked: Level 4 requires**

**AO1 5 marks**

* Good knowledge and understanding (e.g. use of key terms)
* Accuracy (e.g. being correct, not confusing / conflating items such as brain and cognitive development)
* Detail (e.g. use of key terms, results of the study)

**AO2 5 marks**

* Application of K&U to the question (answering the question exactly, not responding to a different one, like ‘detail everything you know about Wood / cognitive development’)
* A well-developed line of reasoning (e.g. connectives).
* which is clear and logically structured (e.g. paragraphs).
* The information presented is relevant (e.g. no waffle or material that is not used).
* and substantiated (e.g. referring to studies and/or fine detail).

7b. Discuss the usefulness of research into research into cognitive development in children in the context of education. [15]

**How the question is marked: Level 4 requires**

**AO1 2 marks**

* + - Good knowledge and understanding (e.g. use of key terms)
		- Accuracy (e.g. being correct, not confusing / conflating items)
		- Detail (e.g. use of key terms, results of the study)

**AO3 13 marks**

* At least 3 points of analysis / evaluation
* Organised (e.g. use of paragraphs)
* Well developed (e.g. points are sustained, rather than multiple points being given)
* Explicitly related to the context of the question (cognitive development / education)
* Effective use of examples where appropriate
* Valid conclusions (e.g. every paragraph is concluded to show why the point matters)
* Well-developed line of reasoning (e.g. logical structure to the whole answer, evidence of planning in the response)
* The information presented is relevant and substantiated (e.g. every part links to the question, nothing is generic).

Research is useful if it

* develops therapies, interventions, preventative action or treatments
* provokes further research in the field
* progresses understanding beyond previous findings
* is generalisable to a wide population
* is valid so that results are accurate.

Points which could be raised:

* Useful to develop scaffolding technqiues
* Gives further research into changes over childhood
* Progresses understanding by making Vygotsky’s ZPD more concrete
* Research is specific to western society

7c. Luke is a teacher at Aldenham Prep School and has a lunchtime design technology class with students aged 6-10 years old. He is aware that the older and younger children might have different needs when learning design technology, such as sewing and woodwork. Outline how Luke could teach the different ages of students in his group, following advice from an educational psychologist. [10]

**How the question is marked: Level 4 requires**

* Good psychological knowledge and understanding (e.g. use of key words and not just common sense ideas)
* Application to the question, which is explicit, accurate, and relevant (shown through making the strategy link to the story)
* A well-developed line of reasoning (e.g. use of connectives).
* which is clear and logically structured (e.g. paragraphs).
* The information presented is relevant (e.g. no waffle or material that is not used).
* and substantiated (e.g. referring to studies and/or fine detail).

**AO2 Strategy**

* specific detail of HOW to implement the strategy

**AO1 Research support**

* explicit research support for each part of the strategy

OPTION 2: Criminal psychology

8a Using the research by Memon and Higham (1999), explain how evidence is collected from witnesses and suspects. [10]

**See 7a How the question is marked**

**Example for 10 marks**

Memon and Higham’s research was a review essay which aimed to analyse issues and research surrounding the Cognitive Interview. The essay was separated into 4 sections. Section 1 = effectiveness of components of the CI technique, where they found the most effective technique was context reinstatement as it allowed more to be remembered due to accessing context dependent cues. Section 2 = comparison of interviews. To judge whether the CI is good, they need to compare it to other interviews which use context reinstatement and rapport building. Section 3 = measuring memory. This needs to go beyond number of correct items recalled and also consider whether it helps the person to reveal detail more accurate and detailed information even if it is embarrassing. Section 4 = quality of training. M&H concluded that for CI to be used successfully, the police need to have intensive (2 day) training by experienced colleagues.

Evidence is collected from witnesses using interviews, which should have some form of context reinstatement, to ensure that the witness can use the context dependent cues to support their memory recall. There are a range of interview styles used, such as the standard interview, cognitive and PEACE techniques. M&H have shown that the best of these use context reinstatement and rapport building. The interviews used to collect evidence can last for a significant amount of time, as M&H have shown that memory should be operationalised in terms of what the process allows and supports the witness / suspect to say, rather than just the number of correct items recalled. Lastly, evidence from witnesses and suspects should be collected by a person trained in the interview techniques, by an experienced colleague, rather than a university lecturer, and for a significant amount of time

8b Discuss the methodological issues of research into the collection of evidence from witnesses. [15]

**See 7b How the question is marked**

**Examples of points which could be raised**

* Practicality: impossible / unethical to research real crime and interviews of suspects and witnesses.
* Research method: a lot of the research is laboratory-based
* Validity: difficulties in judging how effective each of the components of the CI are
* Research design: difficulties in comparison the CI with other interview methods
* Validity: operationalising memory performance - the most common measure is % of interview statements that are correct / incorrect. The research ignores the amount / nature of the reported information. It doesn’t allow for an effective measure of how memory operates.
* Research method: investigating training is based on self-reports. Training needs to focus on: length of training, quality of training, background of the interviewers and their attitudes towards training.

8c. Vanessa has started as the head of Letchmore Heath Police Service and after reading Memon and Higham (1999), she concluded that ‘interviewers differ in their ability and motivation to conduct a good interview’. Outline how Vanessa could improve police interviews at Letchmore Heath Police Service, following advice from a criminal psychologist.

**See 7c How the question is marked**

**Example for 10 marks**

The psychologist could recommend that the LHPS should conduct witness interviews using the PEACE interviewing framework. This is because everyone who conducts these interviews has to be trained thoroughly in how to do them, so there would be more consistency. Memon and Higham have showed that consistency is an issue in the outcomes of interviews.

The first stage in the PEACE technique is planning and preparation, such as planning the list of points that need to be proved for an offence to have been committed, how to overcome barriers such as language barriers, or vulnerable witnesses. This may not address the police’s motivations in the interview, but it will help there to be consistency in the different interviewing abilities.

The next stage in the PEACE technique is engage and explain: to develop rapport and explain interview processes and procedures. Having a relaxed interviewee will help the police officer to be more motivated as Dion shows that we like people who are like us.

After the interviewee has given an account, the PEACE technique has the 4th stage which is closure. This is when the interviewer ensures that the interview ends well so that the witness is comfortable to speak again in the future. This is helpful to motivate the police officers so that they feel useful and gives them a sense of authority over the interviewee. Hall and Player have shown that motivating factors are important in people who collect evidence.

The last stage of the PEACE technique is to evaluate what was said and how the interviewer performed during the interview. Having the chance to be self-reflective will help the interviewers to perform as well as they can and will give them greater motivation to do so. Chaney shows that positive reinforcement helps to gain positive results.