GradeMax

CAMBRIDGE
International Education

Cambridge International AS & A Level

PSYCHOLOGY **9990/22**

Paper 2 Research Methods **February/March 2026**

MARK SCHEME

Maximum Mark: 60

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the February/March 2026 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

This document consists of **19** printed pages.

© Cambridge University Press & Assessment 2026

[Turn over

GradeMax

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptions for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1:

Marks must be awarded in line with:

- the specific content of the mark scheme or the generic level descriptors for the question
- the specific skills defined in the mark scheme or in the generic level descriptors for the question
- the standard of response required by a candidate as exemplified by the standardisation scripts.

GENERIC MARKING PRINCIPLE 2:

Marks awarded are always **whole marks** (not half marks, or other fractions).

GENERIC MARKING PRINCIPLE 3:

Marks must be awarded **positively**:

- marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate
- marks are awarded when candidates clearly demonstrate what they know and can do
- marks are not deducted for errors
- marks are not deducted for omissions
- answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.

GENERIC MARKING PRINCIPLE 4:

Rules must be applied consistently, e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.

GENERIC MARKING PRINCIPLE 5:

Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).

GENERIC MARKING PRINCIPLE 6:

Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

© Cambridge University Press & Assessment 2026

GradeMax

Social Science-Specific Marking Principles (for point-based marking)

1 Components using point-based marking:

- Point marking is often used to reward knowledge, understanding and application of skills. We give credit where the candidate's answer shows relevant knowledge, understanding and application of skills in answering the question. We do not give credit where the answer shows confusion.

From this it follows that we:

a DO credit answers which are worded differently from the mark scheme if they clearly convey the same meaning (unless the mark scheme requires a specific term)

b DO credit alternative answers/examples which are not written in the mark scheme if they are correct

c DO credit answers where candidates give more than one correct answer in one prompt/numbered/scaffolded space where extended writing is required rather than list-type answers. For example, questions that require *n* reasons (e.g. State two reasons …).

d DO NOT credit answers simply for using a 'key term' unless that is all that is required. (Check for evidence it is understood and not used wrongly.)

e DO NOT credit answers which are obviously self-contradicting or trying to cover all possibilities

f DO NOT give further credit for what is effectively repetition of a correct point already credited unless the language itself is being tested. This applies equally to 'mirror statements' (i.e. polluted/not polluted).

g DO NOT require spellings to be correct, unless this is part of the test. However spellings of syllabus terms must allow for clear and unambiguous separation from other syllabus terms with which they may be confused (e.g. Corrasion/Corrosion)

2 Presentation of mark scheme:

- Slashes (/) or the word 'or' separate alternative ways of making the same point.
- Semi colons (;) bullet points (•) or figures in brackets (1) separate different points.
- Content in the answer column in brackets is for examiner information/context to clarify the marking but is not required to earn the mark (except Accounting syllabuses where they indicate negative numbers).

3 Calculation questions:

- The mark scheme will show the steps in the most likely correct method(s), the mark for each step, the correct answer(s) and the mark for each answer
- If working/explanation is considered essential for full credit, this will be indicated in the question paper and in the mark scheme. In all other instances, the correct answer to a calculation should be given full credit, even if no supporting working is shown.
- Where the candidate uses a valid method which is not covered by the mark scheme, award equivalent marks for reaching equivalent stages.
- Where an answer makes use of a candidate's own incorrect figure from previous working, the 'own figure rule' applies: full marks will be given if a correct and complete method is used. Further guidance will be included in the mark scheme where necessary and any exceptions to this general principle will be noted.

© Cambridge University Press & Assessment 2026

GradeMax

4 Annotation:

- For point marking, ticks can be used to indicate correct answers and crosses can be used to indicate wrong answers. There is no direct relationship between ticks and marks. Ticks have no defined meaning for levels of response marking.
- For levels of response marking, the level awarded should be annotated on the script.
- Other annotations will be used by examiners as agreed during standardisation, and the meaning will be understood by all examiners who marked that paper.

PapaCambridge
papacambridge.com

GradeMax

Annotations guidance for centres

Examiners use a system of annotations as a shorthand for communicating their marking decisions to one another. Examiners are trained during the standardisation process on how and when to use annotations. The purpose of annotations is to inform the standardisation and monitoring processes and guide the supervising examiners when they are checking the work of examiners within their team. The meaning of annotations and how they are used is specific to each component and is understood by all examiners who mark the component.

We publish annotations in our mark schemes to help centres understand the annotations they may see on copies of scripts. Note that there may not be a direct correlation between the number of annotations on a script and the mark awarded. Similarly, the use of an annotation may not be an indication of the quality of the response.

The annotations listed below were available to examiners marking this component in this series.

Annotations

Annotation	Meaning
	Correct point
	Incorrect point
	Benefit of doubt
	Repetition (of stem or within response)
	Unclear point
	Generic mark
	Used to show Level 1, 2, 3, 4, or 5 in the 10-mark planning Q
	Not answering question
	Acknowledge blank pages
	Something is missing
	Used for each point of description of a required feature in the 10-mark planning Q

© Cambridge University Press & Assessment 2026

GradeMax

Important marking guidelines for reference

NR or zero	**Award No Response (NR):** • if there is nothing written at all in the answer space • if there is any comment un elated to the question being asked (e.g. 'can't do', 'don't know') • if there is any sort of mark which isn't an attempt at the question (e.g. a dash, a question mark). Note: you can press the # or / key to enter NR **Award Zero (0):** • if there is any attempt that earns no credit, eg the candidate copying all or some of the question, or any working that does not earn any marks, whether crossed out or not.
Crossed out work	Please note that if a candidate crosses out a question and does not re-attempt the same question, you must attempt to mark the crossed out work.
Annotate every question	Please place a marking icon on **every question** and to indicate each mark awarded (**number of ticks = number of marks** on all questions except part (a) of the last question). However, you do **not** need to put 'seen' on NR spaces.

© Cambridge University Press & Assessment 2026

Question	Answer	Marks
1	**The mode is a measure of central tendency.**	
1(a)	**State the mode for the set of results in Table 1.1** **Table 1.1** Total score: 7, 6, 3, 4, 5, 6, 8, 2 Statement of mode = 1 Mode = 6 (**definitive**)	**1**
1(b)	**Explain why the mode is a measure of central tendency.** Explanation = 1 • Because it represents **a typical** score; • Because it gives the **most frequent** score	**1**

Question	Answer	Marks
2	**In the study by Piliavin et al. (subway Samaritans), the researchers intended that the experimental design would be an independent measures design.**	
2(a)	**Outline what is meant by an 'independent measures design'.** outline = 1 Where different participants are allocated to **each condition/level of the IV** (in an experiment). Accept alternative wording with the same meaning	**1**
2(b)	**Explain one reason why the experimental design in this study may not have been an independent measures design.** explanation = 1 Because they could not know if the **same people** had been on the train for **more than one victim/model** type;	**1**

Question	Answer	Marks
3	**The study by Fagen et al. (elephant learning) used captive elephants as participants. Elephants are very large animals and require ethical and practical considerations. Suggest two ways that the size of the elephants might have affected the study.** 1 mark for a way ×**2** • They would need a **very large** enclosure; • The researchers would need to be very careful that they didn't **get hurt**; • They could not be put **in a 'cage'** to be tested; • Far more **difficult to handle** than smaller animals (that can be caged and restricted in terms of where they can go)	**2**

© Cambridge University Press & Assessment 2026

Question	Answer	Marks
4	**In the study by Dement and Kleitman (sleep and dreams), the researchers studied a small number of participants.**	
4(a)	**Some of the participants were sleep researchers and members of their families. State the sampling technique used for these participants.** 1 mark for opportunity sampling/snowball sampling [definitive]	**1**
4(b)	**Explain <u>two</u> weaknesses of the sample used.** 1 mark for each weakness ×**2** 1 mark for detail ×**2 [accept 2 different detail marks for one weakness: would be max 3]** **Low generalisability; (weakness)** • because all the Ps are likely to be **similar**; • because it was a very small sample; **Too few women; (weakness)** • so results may only apply to men; (detail) **Bias/demand characteristics; (weakness)** • because some Ps were researchers (so understood the aim);	**4**

Question	Answer	Marks
5	**Jürgen tested participants' memories in a room at his university early in the morning. Some participants said they were hungry and some did not. When some participants were tested, there was a loud noise from building work happening in the next room.**	
5(a)	**Describe what is meant by a 'participant variable', including an example from Jürgen's study.** Description = 1 Example from Jürgen = 1 • (A participant variable is) an i**nternal** characteristic/state/emotion of the participants (which affects responses on the DV); (description) • (A participant variable is) is an Individual difference that hides or exaggerates differences between levels of the IV; (description) Example from Jürgen: Hunger (in Ps) [definitive]	**2**

© Cambridge University Press & Assessment 2026

GradeMax

Question	Answer	Marks
5(b)	**Describe what is meant by a 'situational variable', including an example from Jürgen's study.** Description = 1 Example from Jürgen = 1 • (A situational variable is) an **external/environmental** factor (which affects responses on the DV); (description) • (A situational variable is) a confounding variable in the environment that hides or exaggerates differences between levels of the IV; (description) Example from Jürgen: Noise (in building) [definitive]	**2**

Question	Answer	Marks
6	**Describe how independent variables (IVs) can be operationalised, using any example(s).** 1 mark for each definition/point of detail, up to a maximum of 2 for each 'way'. 1 mark for each example, max 2 for each 'way', max 4 in total. Examples can include examples from any studies (core studies, other studies, candidate's own studies). Max 4 if no examples or if only about one 'way'. Only 1 example needed to access 6 marks. **Definitions (max 2 for examples).** • Operationalisation is where the independent variables used are made measurable/where abstract ideas are made observable/measurable. • E.g. morning as a term is not clearly defined but could be by two different time of day (10.00 versus 14.00) • E.g. happiness is not clearly defined but happy versus unhappy could be defined by the number of times a person laughs. **Using existing/naturally occurring differences between people; (way)** • E.g. sex (males and females); (detail) • Baron-Cohen used participants with and without ASD; (core study) • E.g. test personality and test sleep in introverts and extraverts; (own study) **Existing differences in situations; (way)** • season (winter and summer); (detail) • e.g. could compare depression level in summer and winter; (own study) • e.g. Hassett et al. gave monkeys plush or wheeled toys; (core study) **Manipulate differences between groups of people/the same people; (way)** • e.g. drink coffee or not drink coffee; (detail) • e.g. Andrade either gave or did not give Ps doodling paper; (core study)	**6**

© Cambridge University Press & Assessment 2026

Question	Answer	Marks
7	**Chun is observing non-verbal behaviours, for example, nodding when people pass each other in the street. She will record the frequency of these behaviours using a behavioural checklist.**	
7(a)	**Chun's behavioural checklist will include nodding and <u>two</u> other behaviours.**	
7(a)(i)	**Suggest <u>two</u> categories other than nodding that Chun could record to investigate the frequency of different non-verbal behaviours seen in the street. Do <u>not</u> include verbal behaviours in your answer.** 1 mark for a behavioural category ×**2** The categories **must** be observable/**must** relate to behaviours in the street/must **not** be verbal For example: • waving; • hugging; • making eye contact; • shaking hands; • smiling There are other creditworthy categories	**2**
7(a)(ii)	**For <u>one</u> of the categories you have suggested in <u>7(a)(i)</u>:** **Explain <u>one</u> reason observing that category would be valid.** 1 mark reason for validity of observational category *Waving*: • Valid to see **because** <u>hand up high</u> (above other people's heads); *Hugging*: • Valid **because** <u>involves both people</u> (so obvious); *Making eye contact*: • Valid **because** <u>easy to notice</u> as it is a personal influence; *Shaking hands:* • Valid **because** involves both people (so obvious); There are other creditworthy reasons.	**1**

© Cambridge University Press & Assessment 2026

GradeMax

Question	Answer	Marks
7(a)(iii)	**For <u>one</u> of the categories you have suggested in part (a)(i):** **Explain <u>one</u> reason observing that category may <u>not</u> be valid** 1 mark reason for lack of validity of observational category *Waving*: • Not valid **because** could be shading sun / swatting flies; *Hugging*: • Not valid **because** could just bump into each other; *Making eye contact*: • Not valid **because** hard to see from a distance; *Shaking hands:* • Not valid **because** could just be handing something over; There are other creditworthy reasons.	**1**

© Cambridge University Press & Assessment 2026

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>7(b)</td><td>
The behavioural checklist will be a table for collecting data.

Draw a table that Chun could use in the space below.

1 mark for a table that identifies behaviours but would not be usable
2 marks for a table that could collect data but with difficulty
3 marks for a table that would allow collection of full data

<u>3</u> marks
all three variables plus some explicit way of measuring frequency/number/ whether performed or not)
<table>
<tr><td></td><td>Nodding</td><td>Suggestion 1</td><td>Suggestion 2</td></tr>
<tr><td>Tally / count of each behaviour</td><td></td><td></td><td></td></tr>
</table>
2 marks
has all three behaviours in a useable table but does not give a <u>measurable way</u> of collecting the data but does give an idea that it is the behaviour you are measuring.
<table>
<tr><td></td><td>Nodding</td><td>Suggestion 1</td><td>Suggestion 2</td></tr>
<tr><td>Behaviour</td><td></td><td></td><td></td></tr>
</table>
1 mark
Has all three behaviours but does not suggest it is the behaviours you are measuring (number of people of what?)
<table>
<tr><td></td><td>Nodding</td><td>Suggestion 1</td><td>Suggestion 2</td></tr>
<tr><td>number of people</td><td></td><td></td><td></td></tr>
</table>
Has the idea of frequency but does not say what of
<table>
<tr><td>Participant number</td><td>Tally of behaviour</td></tr>
<tr><td>1</td><td></td></tr>
<tr><td>2</td><td></td></tr>
<tr><td>3</td><td></td></tr>
</table>
</td><td>3</td></tr>
</table>

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>7(b)</td><td>0 marks – neither frequency or behaviours

<table><tr><td>Participant number</td><td>behaviour</td></tr><tr><td>1</td><td></td></tr><tr><td>2</td><td></td></tr><tr><td>3</td><td></td></tr></table></td><td></td></tr>
<tr><td>7(c)</td><td>Explain how <u>two</u> ethical guidelines are relevant to Chun's study.

1 mark for an ethical guideline ×2 [all relevant except deception]
1 mark for link to Chun's study ×2

(minimising) harm; (guideline)
• People on the street might be worried that they are bring watched; (link)

Consent; (guideline)
• Chun cannot ask for consent as it would change their non-verbal behaviour; (link)

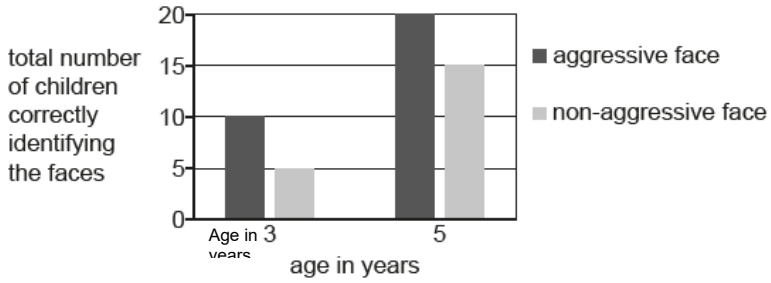
Confidentiality; (guideline)
• Chun does not need participants' personal information to watch non-verbal behaviours/they could not be identified from the frequency of behaviours/she can use numbers rather than names of participants seen in the street ; (link)

Privacy; (guideline)
• Chun could be invading privacy if they do not want to be seen meeting on the street; (link)
• Chun is not invading privacy as she is in the street (and people expect to be seen there); (link)

Debriefing; (guideline)
• Chun could tell the participants afterwards their non-verbal behaviour has been observed; (link)
• Chun may not be able to debrief the participants afterwards as they will walk away (BOD) (as they are in the street / might go in opposite direction); (link)</td><td>4</td></tr>
</table>

Question	Answer	Marks
8	**Helen has conducted an experiment to test the ability of three-year-old and five-year-old children to identify two different types of face: 'aggressive' faces and 'non-aggressive' faces. There were 40 children in each age group.**	
8(a)	**The aggressive faces and non-aggressive faces that Helen used were similar.**	
8(a)(i)	**Suggest <u>two</u> features of the faces that Helen should have ensured were similar.** Suggestion of feature = 1 ×**2** The same: • gender • ethnicity • size/colour of (photo of) face • size/colour of facial features (eyes/nose etc.) • age • eye colour • facial hair.	**2**
8(a)(ii)	**For <u>one</u> of the features that you suggested in <u>8(a)(i)</u>:** **Explain why it was important for that feature to be similar.** Explanation of importance, i.e. control /standardisation (can be generic) = 1 Link to <u>feature</u> = 1 Explanation: • To ensure differences only due to IV; (suggestion, generic) • As a control/to standardise; (suggestion, generic) • So differences are due only to aggression; (suggestion, linked) Link: • Male faces might seem more aggressive than females' anyway (or reverse argument) • Faces with makeup might seem friendlier (or reverse argument) • If more body is shown the face might have less impact (or reverse argument) • A bigger/colour photo might seem more aggressive (or reverse argument)	**2**

© Cambridge University Press & Assessment 2026

Question	Answer	Marks
8(b)	**Helen's results are shown in Figure 8.1.**  **Figure 8.1** **Draw <u>one</u> conclusion from Helen's results.** Any conclusion = 1 Complete conclusion = 2 • (All) children are better at identifying aggressive faces than non-aggressive faces (or reverse argument). • Younger / 3-year-old children make more mistakes on judgement of aggression on faces than older / 5-year-old children (or reverse argument). • Between the ages of 3 and 5, children get much better at identifying non-aggressive faces but only slightly better at identifying aggressive faces; Note: just restating results = 0 [NAQ]	**2**

Question	Answer	Marks
9	**Sundar is planning a longitudinal study. He aims to investigate changes in attention from late childhood to adulthood.**	
9(a)	**Sundar plans to recruit children who are 15 years old and study them until they are 30 years old.**	
9(a)(i)	**Describe <u>one</u> way that Sundar could recruit a representative sample from his local school.** 1 mark for a **way** to recruit a representative sample (random) 1 mark for **how** to apply to Sundar's study (must only recruit 15-year-olds) Random sampling; (way) Use the school register for year 10 / list of 15-year-olds and select using random number tables (until sample size achieved); (how) There are other creditworthy descriptions of how this could be applied.	**2**

Question	Answer	Marks
9(a)(ii)	**Suggest <u>one</u> reason why Sundar should recruit his sample from more than one school. Your answer <u>must</u> relate to Sundar's aim.** 1 mark for reason (can be generic) 1 mark for link to attention span in different schools **Because it will be more representative/generalisable; (generic reason)** • One **school** might be better and help the children to pay **attention**; (link) **Because it will avoid bias; (generic reason)** • In **schools** with badly behaved children **attention** will be low; (link)	**2**
9(b)	**Sundar will need to recontact his participants during the study to retest them.**	
9(b)(i)	**Suggest a suitable time interval for Sundar to retest his participants. Justify your answer.** 1 mark for suggested (fixed) interval, eg yearly, termly 1 mark for justification Yearly/every 5 years; (interval) Because if attention span is changing, it needs to be quite often; (just) Because asking too frequently could cause them to drop out; (just) (not weekly as changes would not be apparent)	**2**
9(b)(ii)	**Suggest <u>two</u> problems that Sundar may have when recontacting his participants.** 1 mark for a problem ×**2** • They may have moved away • They may have changed address/moved school • Changed phone number / email address • May have died/be ill • May not want to be in the study anymore	**2**

© Cambridge University Press & Assessment 2026

GradeMax

Question	Answer	Marks
10	**Chris is aware that his friends vary in terms of how much they enjoy spending time with other people. He is also aware of a variation in his friends' reading habits: some read more books than others.**	

PapaCambridge papacambridge.com

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>10(a)</td><td>
Describe how Chris could conduct a correlational study to investigate the relationship between enjoying spending time with other people and reading habits.

Do <u>not</u> describe sample / sampling technique or ethical issues/guidelines in your answer.

The four required features for correlational study are:
(a) identifying two co-variables i.e. how MUCH they enjoy spending time with other people and NUMBER OF books / reading [i.e. must be a correlation]
(b) measure of books/reading: (operationalisation e.g. number, speed, how many at home, Kindle library, time spent reading. How this is measured)
(c) measure of enjoying spending time with others: (operationalisation e.g. how? questionnaire/ interview/ observation, actual measure, e.g. questions, score)
(d) nature of relationship: (what will be done with the data, e.g. totals, tables, scatter graph)

To mark Q10(a), create four ‘imaginary columns’ down one margin, using one column for each of the four required features. Tick each feature (tick-a, tick-b, tick-c, tick-d) when it appears, then underline the letter (a) for detail.

Use L1, L2, L3, L4, L5 at the end of the response to indicate the level.
Use the table below to mark candidate responses to this question.

Other appropriate responses should also be credited.

<table>
<tr><th>Level</th><th>The response:</th></tr>
<tr><td>Level 5
9-10 marks</td><td>• has all the required features, all with <u>detail</u>, with mostly appropriate terminology.
AND
• clearly applies knowledge of methodology involved in planning an investigation.</td></tr>
<tr><td>Level 4
7–8 marks</td><td>• has all the required features, but only some of these with <u>detail</u>, with some appropriate terminology.
AND
• applies knowledge of methodology involved in planning an investigation.</td></tr>
<tr><td>Level 3
5–6 marks</td><td>• has some of the required features with <u>detail</u> / all of the required features with <u>no</u> <u>detail</u>, and some appropriate terminology.
AND
• applies a basic knowledge of methodology involved in planning an investigation.</td></tr>
</table>
</td><td>10</td></tr>
</table>

GradeMax

<table>
<tr><th>Question</th><th>Answer</th><th>Marks</th></tr>
<tr><td>10(a)</td><td>
<table>
<tr><th>Level</th><th>The response:</th></tr>
<tr><td>Level 2
3–4 marks</td><td>• has at least two of the required features, with little appropriate terminology.
AND
• attempts to use knowledge of methodology involved in planning an investigation.</td></tr>
<tr><td>Level 1
1–2 marks</td><td>• has one of the required features and uses little appropriate terminology.
AND
• makes a limited attempt to use knowledge of methodology involved in planning an investigation, eg may not use the method required by the question.</td></tr>
<tr><td>0 marks</td><td>No creditable response.</td></tr>
</table>
</td><td></td></tr>
<tr><td>10(b)</td><td>For <u>one</u> part of the procedure, you described in <u>10(a)</u>:</td><td></td></tr>
<tr><td>10(b)(i)</td><td>Describe <u>one</u> practical/methodological strength of this part of the procedure.

Do <u>not</u> refer to sampling or ethics in your answer.

explanation of strength (generic or linked) = 1
detail = 1 (e.g. effect on results)
Part of procedure may relate to:
• operationalisation/objectivity
• situational/participant variables
• controls
• design

Accept other practical influences on validity or reliability</td><td>2</td></tr>
<tr><td>10(b)(ii)</td><td>Describe <u>one</u> practical/methodological weakness of this part of the procedure.

Do <u>not</u> refer to sampling or ethics in your answer.

explanation of weakness (generic or linked) = 1
detail = 1 (e.g. effect on results)
Part of procedure may relate to:
• operationalisation/subjectivity
• situational/participant variables
• controls
• design

Accept other practical influences on validity or reliability</td><td>2</td></tr>
</table>

© Cambridge University Press & Assessment 2026