



GCE AS MARKING SCHEME

SUMMER 2018

**AS (NEW)
PSYCHOLOGY - UNIT 2
2290U20-1**

INTRODUCTION

This marking scheme was used by WJEC for the 2018 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners' conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

GCE AS PSYCHOLOGY

Unit 2

Question	AO1	AO2	AO3	TOTAL
1	10		10	20
2	3			3
3	4			4
4		4		4
5			6	6
6	4			4
7		5		5
8		10	2	12
9	3	19		22
TOTAL	24	38	18	80

GCE AS PSYCHOLOGY - UNIT 2

SUMMER 2018 MARK SCHEME

SECTION A Contemporary Debate

1. Assess the role of the mother as primary care-giver, including consideration of social and cultural diversity. [20]

This debate is linked to the psychodynamic approach. However, the materials used in the responses may be taken from any approach and perspective within psychology. Some reference could also be made to economic, social and political evidence (as long as it is explicitly linked to the psychological issue), as well as the consideration of social and cultural diversity.

Credit **could** be given for the discussion of:

- Named research into attachment (must be contextualised) e.g. Mother as primary caregiver through the views of Freud's personality development, Bowlby's Maternal Deprivation Hypothesis, Monotropy and Internal Working models, and the influence of day care (Belsky, 2006; Sigman, 2011).
- Consideration of other approaches within the debate e.g. the behaviourist view of conditioning during feeding, Harlow's (1959) research into monkeys and Shaffer and Emerson's (1964) research into multiple attachments.
- Discussion of alternative primary caregivers e.g. the role of the father (Feldman, 2010; Abrahams, 2014; Gettler *et al.*, 2011; Frodi *et al.*, 1978), the influence of adoptions (Rutter's (1998) Romanian orphans), or the role of the extended family/multiple attachment theories (Rutter, 1970).
- Any other appropriate material.

Marks	AO1
10	<ul style="list-style-type: none">• Exemplars used are well chosen to support the points made.• Level of accuracy is thorough.• There is depth and range to material included.• Effective use of terminology throughout.
7-9	<ul style="list-style-type: none">• Exemplars used are appropriate.• Level of accuracy is reasonable.• There is depth and range to material used, but not in equal measure.• Good use of terminology.
4-6	<ul style="list-style-type: none">• Exemplars may not always be appropriate.• Level of accuracy is basic.• There is depth or range only in material used.• There is some use of appropriate terminology.
1-3	<ul style="list-style-type: none">• Exemplars are limited and not always made relevant.• Level of accuracy is superficial.• Very little use of appropriate terminology.
0	<ul style="list-style-type: none">• Inappropriate answer given.• No response attempted.

Criteria for AO3 content of this question is on the next page.

Credit **could** be given for discussion of :

- Social implications – Influence of the evidence on political decisions e.g. changes to maternity/paternity rights in the UK make sharing of responsibility possible. Candidates may discuss how this influences the view of mother as primary caregiver, or redresses gender stereotypes.
- Cultural diversity – discussions about changes in the makeup of society e.g. the increase in single parent families, the role of grandparents, and males who take on the role of the caregiver.
- Economic implications – The impacts of the cost of childcare and government incentives (e.g. tax relief) that encourage parents to work e.g. comments on the implications of wide scale, short-term separations on future generations, comparisons to different generations etc.
- Ethical implications – risks to values, beliefs, relationships, status or privacy e.g. single-sex couples (particularly males) are disadvantaged by the view of the mother as primary caregiver, and mothers who work are stigmatised.
- Appropriateness of the historical evidence applied to modern society – is early research, e.g. Freud/Bowlby, relevant?
- Evaluation of the research (must be contextualised) e.g. validity/reliability issues e.g. Freud, Bowlby and Rutter reviewed disturbed individuals and/or utilised case study methodologies.
- Evaluative statements and comparisons about the view of the mother as the primary caregiver.
- Any other appropriate analysis.

Marks	AO3
10	<ul style="list-style-type: none"> • A thorough discussion is made of both sides of the debate. • Evaluative comments are evidently relevant to the context. • Structure is logical throughout. • An appropriate conclusion is reached based on evidence presented.
7-9	<ul style="list-style-type: none"> • A reasonable discussion is made of both sides of the debate. • Evaluative comments show some relevance to the context. • Structure is mostly logical. • A reasonable conclusion is reached based on evidence presented.
4-6	<ul style="list-style-type: none"> • A basic discussion of both sides of the debate. <p>OR</p> <ul style="list-style-type: none"> • A reasonable discussion of only one side of the debate. • Evaluative comments are generic and not appropriately contextualised. • Structure is reasonable. • A basic conclusion is reached.
1-3	<ul style="list-style-type: none"> • A superficial discussion is made of the debate. • Evaluative comments are superficial. • Answer lacks structure. • No conclusion.
0	<ul style="list-style-type: none"> • Inappropriate answer given. • No response attempted.

SECTION B
Principles of Research

2. (a) Define the term 'dependent variable'. [2]

Exemplar answer:	
The dependent variable (DV) refers to the variable which is measured by the psychologist. For example, they will measure the influence of a manipulated variable (IV) on the behaviour of the participant (the DV).	
Marks	AO1
2	<ul style="list-style-type: none"> • Clear and detailed definition.
1	<ul style="list-style-type: none"> • Basic definition.
0	<ul style="list-style-type: none"> • Inaccurate definition. • No response is given.

- (b) Identify **one** variable measured in Milgram's (1963) 'Behavioral study of Obedience'. [1]

Exemplar answer:	
<ul style="list-style-type: none"> • The maximum shock (voltage) the participant administers before he refuses to go any further. • Any other appropriate responses (e.g. behavioural measures). 	
Marks	AO1
1	<ul style="list-style-type: none"> • A variable is identified.
0	<ul style="list-style-type: none"> • An inappropriate dependent variable is identified. • No response is given.

3. Using an example, describe a matched pairs experimental design.

[4]

Exemplar answer:

Matched pairs is a type of independent design where participants are matched by characteristics that are relevant to the study. One member of the pair completes one condition and the other completes the second condition. For example, participants could be given a memory test. In one condition it is noisy, in the other it is not. Participants would complete only one condition (noise or no noise) but would be similar (matched) to someone completing the second condition. e.g. they could be similar in terms of age, gender, IQ etc.

Marks	AO1
4	<ul style="list-style-type: none"> Description and level of accuracy is thorough and clearly linked to an example.
3	<ul style="list-style-type: none"> Description and level of accuracy is reasonable and clearly linked to an example. <p>OR</p> <ul style="list-style-type: none"> Description and level of accuracy is thorough and linked to an example.
2	<ul style="list-style-type: none"> Description and level of accuracy is reasonable and linked to an example. <p>OR</p> <ul style="list-style-type: none"> Description and level of accuracy is thorough and no link to an example.
1	<ul style="list-style-type: none"> Description and level of accuracy is reasonable and no link to an example. <p>OR</p> <ul style="list-style-type: none"> Only an example is given.
0	<ul style="list-style-type: none"> Inappropriate answer given. No response attempted.

4. Explain the ethics of working with vulnerable individuals in Kohlberg's (1968) research 'The child as a moral philosopher'.

[4]

Credit **could** be given for explanation of:

- Valid consent – In the case of very young children, or those with very limited competence, it will be important for Kohlberg to constantly assess their willingness to participate e.g. through observing both verbal and non-verbal cues. This could have been difficult for Kohlberg as he was asking the children about moral dilemmas and their expressions may not be about their willingness to participate, but their understanding and thought processes surrounding the dilemma. Parental consent would have been required for those participants under the age of 16 according to current BPS guidelines, where Kohlberg's participants were as young as 10 years old at the beginning of the study.
- Risks of stress, anxiety, humiliation and pain – Kohlberg needed to ensure that his participants were not negatively impacted (made more vulnerable) through the moral dilemmas and so would have to ensure that each participant left in a similar state to the one in which they arrived.
- Confidentiality – Any negative consequences of Kohlberg's research which could make participants of any age vulnerable e.g. the potential of risk to participant status should have been removed through use of confidentiality and debriefing.
- Any other appropriate responses (e.g. use of ethical guidelines etc.)

Marks	AO2
3-4	<ul style="list-style-type: none"> • Explanation and level of accuracy is reasonable. • Links to Kohlberg's research are appropriate and related to vulnerable individuals.
1-2	<ul style="list-style-type: none"> • Explanation and level of accuracy is basic. • Links to Kohlberg's research may be limited, muddled and/or incoherent.
0	<ul style="list-style-type: none"> • Inappropriate answer is given. • No response is given.

5. Evaluate research that is conducted on-line.

[6]

Credit **could** be given for:

- Advantages of research conducted on-line e.g. large numbers of participants from a range of backgrounds can be potentially accessed (improves population validity); it is cost effective and data analysis is generally quicker than research in the field, or laboratory environments, because responses are already transcribed or in electronic format (removes an element of researcher bias from data collection).
- Disadvantages of research conducted on-line e.g. research is often limited to questionnaires/structured interviews; can cause ethical issues such as valid consent, risk of harm etc. as the participants are not directly observed to gauge their reactions; thorough debriefing is more difficult in on-line research.
- Comparisons to other locations for research, e.g. the relative merits/problems of research that is conducted on-line compared to in a laboratory or in the field.
- Any other appropriate evaluation.

Marks	AO3
5-6	<ul style="list-style-type: none"> • Evaluation of research conducted on-line is thorough. • There is depth and range to the material included.
3-4	<ul style="list-style-type: none"> • Evaluation of research conducted on-line is reasonable. • There is depth and range to the material but not in equal measure.
1-2	<ul style="list-style-type: none"> • Evaluation of research conducted on-line is basic. • Depth or range to the material.
0	<ul style="list-style-type: none"> • Inappropriate answer is given. • No response is given.

6. (a) Define the term 'internal validity'. [2]

Exemplar answer:	
The study measures what it intends to measure (as confounding variables have been controlled and will not affect the results). The findings are accurate and the effects on the DV are caused by the IV.	
Marks	AO1
2	<ul style="list-style-type: none">• Clear and detailed definition.
1	<ul style="list-style-type: none">• Basic definition.
0	<ul style="list-style-type: none">• Inaccurate definition.• No response is given.

(b) Define the term 'external reliability'. [2]

Exemplar answer:	
The extent to which a test produces consistent results over several occasions. For example, are results a one off (lacking in external reliability) or can they be replicated (high external reliability).	
Marks	AO1
2	<ul style="list-style-type: none">• Clear and detailed definition.
1	<ul style="list-style-type: none">• Basic definition.
0	<ul style="list-style-type: none">• Inaccurate definition.• No response is given.

7. In Milgram's (1963) 'Behavioral study of Obedience' he chose to use a target population of male, self-selected participants. Explain how his choice impacted on the possible applications of the research. [5]

Credit **could** be given for description of:

- Gender bias – it may be difficult to apply findings to the obedience of women. However, at the time the military was mainly made up of males making his findings more representative when testing whether 'the German's are different' hypothesis was true. In doing so Milgram's work can be used to potentially prevent atrocities such as Auschwitz.
- Sample bias – volunteers are not representative of the general population; they may have some features that are 'unique' which make them volunteer e.g. they may be more outgoing. This may suggest findings about obedience are invalid and hence applications are limited. However, the army does contain both volunteers and those who have been conscripted, thus the sample may be representative. This has implications when the research is used as a defence for war crimes and subsequent prevention through training/raising awareness etc.
- Any other appropriate responses.

Marks	AO2
5	<ul style="list-style-type: none"> • Explanation and level of accuracy is thorough. • Depth and range are displayed. • Links to Milgram's research will be explicitly related to the question stem.
3-4	<ul style="list-style-type: none"> • Explanation and level of accuracy is reasonable. • Depth and range is displayed, but not in equal measure. • Links to Milgram's research are limited or not well related to the question stem.
1-2	<ul style="list-style-type: none"> • Explanation and level of accuracy is basic. • Links to Milgram's research may be muddled and/or incoherent.
0	<ul style="list-style-type: none"> • Inappropriate answer is given. • No response is given.

8. A psychologist conducted an experiment into whether people who are bilingual (fluently speak two languages) have a wider vocabulary than those who are monolingual (fluently speak one language). 60 participants, chosen using snowball sampling, were asked to take a multiple choice on-line vocabulary test.

Average vocabulary scores for each group

	Average Score on the Vocabulary Test /100
Bilingual Group	75
Monolingual Group	62

- (a) State a research hypothesis for the above study.

[2]

Exemplar answers:

- Those who are bilingual will score more highly on an on-line vocabulary test than those who are monolingual.
- There will be a difference between the scores for participants who are monolingual and bilingual in an on-line vocabulary test.
- There will be no difference between the scores in an on-line vocabulary test for participants who are monolingual or bilingual, any difference that does occur does so by chance.
- Any other appropriate response (including the reverse of the above points).

Marks	AO2
2	<ul style="list-style-type: none"> • Appropriate hypothesis given with both conditions clearly identified.
1	<ul style="list-style-type: none"> • Appropriate hypothesis given with only one condition clearly identified.
0	<ul style="list-style-type: none"> • An inappropriate null hypothesis is given. • No response is given.

- (b) Describe how **one** extraneous variable could have affected the results for the above study. **[2]**

Exemplar answer:

- Noise in the room when the vocabulary test is completed that negatively affects their score.
- Temperature in the room when completing the vocabulary test that affects their performance e.g. too hot or cold makes their test scores lower.
- Presence of an authority figure (e.g. head teacher or parent) whilst taking the on-line test could have a negative impact on scores.
- Any other appropriate extraneous variables.

NOTE – Extraneous variables are variables in a study that are not being measured or manipulated but affect the results (DV) of all participants' behaviour equally.

Marks	AO2
2	<ul style="list-style-type: none"> • An appropriate extraneous variable is described in context.
1	<ul style="list-style-type: none"> • An appropriate extraneous variable is described.
0	<ul style="list-style-type: none"> • An inappropriate/incorrect extraneous variable is given. • No answer is given.

- (c) (i) Explain how the psychologist could have collected participants using snowball sampling in the above study. **[4]**

Exemplar answer:

The psychologist could have started by asking ten people to participate in her study about vocabulary. She could then have asked them to ask two friends to participate in the study. When the friends had then participated in the vocabulary task they could also ask two of their friends to participate, and the psychologists sample would 'snowball' until she reached her required target population of 60 participants.

- Any other appropriate responses.

Marks	AO2
3-4	<ul style="list-style-type: none"> • Explanation and level of accuracy is reasonable. • Links to the context are appropriate.
1-2	<ul style="list-style-type: none"> • Explanation and level of accuracy is basic. • Links to the context may be limited, muddled and/or incoherent.
0	<ul style="list-style-type: none"> • Inappropriate answer is given. • No response is given.

- (ii) Give **one** disadvantage of snowball sampling. [2]

Exemplar answer:

Could be affected by sample bias as the sample is not likely to provide a cross-section from the target population, because it includes friends of friends, and is thus unrepresentative.

- Any other appropriate disadvantage.

Marks	AO3
2	<ul style="list-style-type: none"> • Clear and detailed disadvantage.
1	<ul style="list-style-type: none"> • Basic disadvantage.
0	<ul style="list-style-type: none"> • Inaccurate disadvantage. • No response is given.

- (d) Identify and explain the experimental design used in the above study. [2]

Exemplar answer:

An independent groups design has been used as there are two separate groups of participants, those who are bilingual and those who are monolingual. Each participant will only be part of one group.

Marks	AO2
2	<ul style="list-style-type: none"> • An appropriate experimental design is identified and explained in context.
1	<ul style="list-style-type: none"> • An appropriate experimental design is identified, but is not explained in context.
0	<ul style="list-style-type: none"> • An inappropriate/incorrect experimental design is given. • No answer is given.

9. A psychologist used primary sources to see if longer beards made males more attractive to women. A correlational study was used, where photographs of 10 men with beards were taken and 20 women were asked to rate their attractiveness on a scale of 1-10 (1 = very unattractive, 10 = extremely attractive). The women's scores of attractiveness were then averaged, using the mean, to create one attractiveness score for each bearded man. The psychologist created the following frequency table to compare beard length to mean attractiveness.

Length of beard compared to level of attractiveness

Photograph number	Length of Beard (in cms)	Level of attractiveness (mean score out of 10)
1	5	6
2	8	4
3	10	4
4	2	8
5	1	9
6	3	7
7	6	5
8	3	4
9	2	7
10	4	6

- (a) Identify the aim of this research.

[1]

Exemplar answer:	
To see if longer beards made males more attractive to women.	
Marks	AO2
1	<ul style="list-style-type: none"> • Appropriate aim given.
0	<ul style="list-style-type: none"> • An inappropriate aim is given. • No response is given.

- (b) Give **one** advantage and **one** disadvantage of using a correlational study in this research. **[2+2]**

Advantages:

- Correlations allow a researcher to see the strength and direction of a relationship e.g. they can see how the length of beards and attractiveness are related to each other.
- Correlations allow a researcher to see a relationship, so that further research can be completed into a phenomena to gain a more valid insight e.g. from this research they could conduct a follow up study to find out if it is the beard that is affecting attractiveness ratings, or some other variable e.g. the physique of the participant.

Disadvantages

- Correlations do not show cause and effect e.g. you cannot say that longer/shorter beards cause a person to be considered more/less attractive, just that they are related.
- Correlations can be affected by confounding variables e.g. perhaps those with shorter beards are more/less likely to smile than those with longer beards, making them more/less attractive.
- Any other relevant contextualised evaluation point.

Marks (per evaluation point)	AO2
2	<ul style="list-style-type: none"> • An appropriate advantage/disadvantage is given and is contextualised.
1	<ul style="list-style-type: none"> • An appropriate advantage/disadvantage is given but is not contextualised.
0	<ul style="list-style-type: none"> • Inappropriate advantage/disadvantage is given. • No response is given.

(c) Describe the term 'primary sources'.

[3]

Answers **could** include:

- Data that is collected directly by the researcher (first-hand).
- Can include both qualitative and quantitative data.
- A range of methodologies could be undertaken to collect the data.
- The information collected from primary sources will specifically relate to the aims of a study e.g. in this case sources would include the males for their beard length and the females for their ratings of attractiveness.
- Any other appropriate description.

Marks	AO1
3	<ul style="list-style-type: none"> • Thorough description of primary sources. • Appropriate use of terminology.
2	<ul style="list-style-type: none"> • Basic description of primary sources. • Some terminology is evident.
1	<ul style="list-style-type: none"> • Superficial description. • May be list like.
0	<ul style="list-style-type: none"> • Inaccurate description is given. • No response is given.

(d) Explain how the mean score for attractiveness could have been calculated in this research. [3]

Exemplar answer:

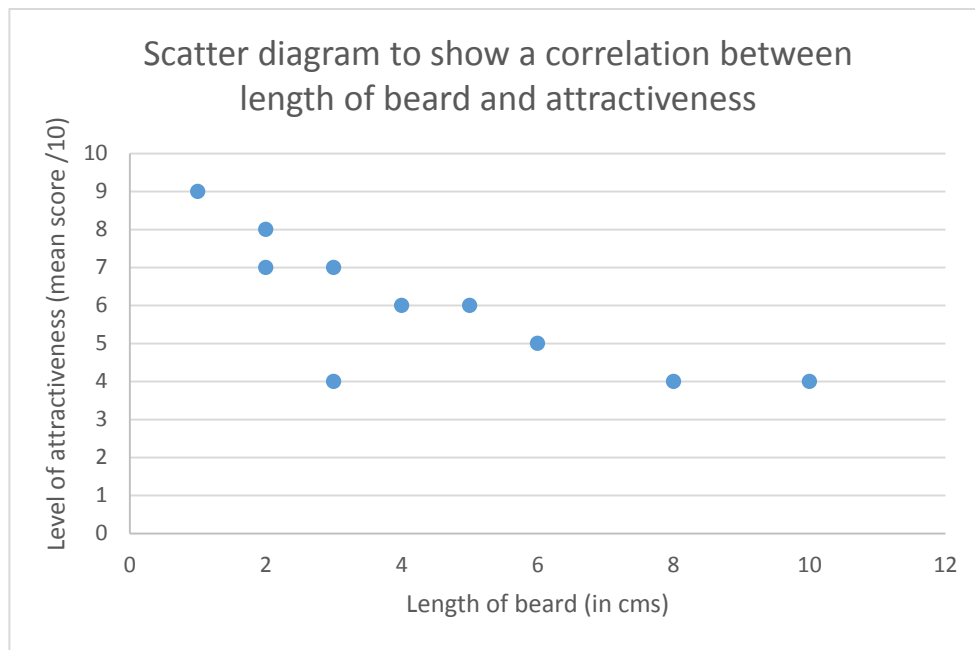
The psychologist would have asked each female to rate the attractiveness of the males individually. For each male they would take the female's scores and create a total score per male by adding each female's scores together. This would then be divided by 20 (the total number of female scores that were added) to create a mean score for each male with a beard.

Marks	AO2
3	<ul style="list-style-type: none"> • An accurate explanation of calculation of the mean is given. • The explanation is fully contextualised.
2	<ul style="list-style-type: none"> • An accurate explanation of calculation of the mean is given, but is not fully contextualised. •
1	<ul style="list-style-type: none"> • An accurate explanation of the calculation of mean is given, but not contextualised.
0	<ul style="list-style-type: none"> • Inappropriate answer is given. • No response is given.

(e) (i) Using the data in the table, draw a scatter diagram.

[5]

Exemplar scatter diagram:



AO2

1 mark given for:

- Correct labelling of axes
- Suitable Scale
- Diagram title

Accurate plotting of data (2 marks)

Mostly accurate plotting of data (1 mark)

(ii) State the strength and direction of the correlation shown in the scatter diagram you created in part (i).

[2]

Exemplar answer:

The scatter diagram shows a strong, negative correlation between length of beard and level of attractiveness (NB: Axes may be transposed).

NOTE – If the scatter diagram is drawn incorrectly in part (i) they can be credited for explaining the diagram they have plotted.

Marks	AO2
2	<ul style="list-style-type: none"> • Strength and direction of the correlation are stated.
1	<ul style="list-style-type: none"> • Strength of the correlation is stated, but direction is not stated. OR • Direction of the correlation is stated, but strength is not stated.
0	<ul style="list-style-type: none"> • Inaccurate statements are made. • No response is given.

- (f) Describe **one** issue of validity in this research, and explain **one** way to deal with this issue. [4]

Exemplar validity issues:	
<ul style="list-style-type: none"> Internal or external validity issues – poor research design, measurement of variables e.g. is a scale of attractiveness particularly objective? Were the scores of 10 females per male representative? Are the males selected representative of all bearded men? Ways to deal with issues – improvement of research design or sampling e.g. standardised procedures, content validity, operationalisation of attractiveness scale, improvements to selection of bearded men etc. Extraneous or confounding variables - other factors that could have affected attractiveness other than the beard e.g. the physique of the males, hair colour, age, general demeanour etc. Ways to deal with extraneous or confounding variables – increased experimental control e.g. matching the physique of the males to minimise its effect, selection of males of similar attractiveness who are asked to grow beards of varying lengths etc. Any other relevant issues 	
Marks	AO2
4	<ul style="list-style-type: none"> The issue of validity and a relevant way to deal with the issue have been fully described, both aspects are explicitly linked to the novel scenario.
3	<ul style="list-style-type: none"> The issue of validity and a relevant way to deal with the issue have been fully described, but only one aspect is explicitly linked to the novel scenario.
2	<ul style="list-style-type: none"> The issue of validity and a relevant way to deal with the issue have been described, but neither is explicitly linked to the novel scenario. <p>OR</p> <ul style="list-style-type: none"> The issue of validity has been described and linked to the novel scenario explicitly, but there is no appropriate way to deal with the issue.
1	<ul style="list-style-type: none"> An appropriate issue of validity has been described, but is not linked to the novel scenario explicitly.
0	<ul style="list-style-type: none"> The issue of validity is merely named and not described. An inappropriate answer is given. No answer is given.