

**GCSE (9–1)**

**Psychology**

**J203/02: Studies and applications in Psychology 2**

General Certificate of Secondary Education

**Mark Scheme for Autumn 2021**

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This mark scheme is published as an aid to teachers and students, to indicate the requirements of the examination. It shows the basis on which marks were awarded by examiners. It does not indicate the details of the discussions which took place at an examiners' meeting before marking commenced.

All examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes should be read in conjunction with the published question papers and the report on the examination.

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## 1. Annotations

Annotation	Meaning
/	
?	Unclear
APP	Application
BOD	Benefit of doubt
λ	Omission
✗	Incorrect
✓	Correct
E	Expansion of a point
EVAL	Evaluation
IRRL	Significant amount of material which doesn't answer the question
J	Justification
KU	Knowledge and Understanding
NBOD	No benefit of doubt given
REP	Repetition

Question		Answer	Mark	Guidance
1	(a)	1 mark for C (Mainly semantic).	1	
1	(b)	1 mark for C (Up to 30 seconds).	1	
1	(c)	1 mark for C (The model does not explain why we can recall things we have not rehearsed).	1	
2	(a)	1 mark for Decays.	1	Allow descriptions pertaining to decay such as fading.
2	(b)	1 mark for 7+/- 2 (5-9) items.	1	Candidates can refer to chunks or units.

Question		Answer	Mark	Guidance
2	(c)	<p>1 mark for 5.5  1 mark for correct workings:</p> <p>4 <del>5</del> 5 6 <del>6</del> 7  <math>5+6 = 11</math>  11 divided by 2 = 5.5</p>	2	Accept alternative methods of calculating the median.
2	(d)	<p>1 mark for correct graph title, for example 'A histogram displaying the median digit span of children aged between 5 and 10 years'.  1 mark for correctly labelled axes, for example 'x-axis = age of child' and 'y-axis = digit span'.  1 mark for correctly plotted data, for example that the graph resembles a histogram (<b>bars joined</b>) with the correct digit span plotted by age from the source).</p>	3	If the chart does not represent a histogram (e.g. a bar chart is drawn), 2 marks can be awarded for a correct title (1) and correctly labelled axes (1).
2	(e)	<p>1 mark for the identification of an appropriate ethical issue.  1 mark for an elaborated response describing how this would be considered in context of the digit span experiment.</p> <p>For example, 'Ling should have considered gaining informed consent [1] before conducting their digit span experiment. Ling could have done this by writing to the children's parents and asking if they would agree to the children taking part' [1], or 'Ling should consider any psychological harm that may result from the study [1] because the children may be embarrassed if they cannot recall many [1]'.</p>	2	<p>The ethical issue must be one that should be considered <i>before</i> conducting the experiment, so debriefing would not be credit worthy here.</p> <p>Where consent is referred to, it must be clear that parental consent is needed as the participants are all under the age of 16 years.</p>

3	(a)	<p>1 mark for a strength of the case study method. 1 mark for applying the strength to Wilson et al. (2008).</p> <p>For example: 'Case studies are very in depth and detailed, gathering a lot of data [1]. This case study was longitudinal spanning 21 years with qualitative and quantitative data gathered [1]'.</p>	2	The strength must pertain to Wilson et al. (2008) for full marks.
3	(b)	<p>1 mark for a weakness of the case study method. 1 mark for applying the weakness to Wilson et al. (2008).</p> <p>For example: 'One weakness of the case study method is the lack of generalisability [1]. Wilson studied Clive Wearing who is a unique individual and highly unusual [1] so there are limitations in generalising the findings.'</p>	2	The weakness must pertain to Wilson et al. (2008) for full marks.

Question		Answer	Mark	Guidance
4		<p>1 mark for a brief response demonstrating an understanding that damage to the hippocampus can cause anterograde amnesia. 2 marks for an elaborated response explaining that damage to the hippocampus results in the inability to pass information from short-term to long-term memory.</p> <p>For example: 'the hippocampus plays a vital role in the formation of new memories [1], so damage to it can lead to anterograde amnesia [1]'.</p>	2	

5		<p>Credit understanding and application of techniques used to influence recall of the fizzy drink, for example: the use of cues, repetition, avoiding overload or using autobiographical advertising.</p> <p><b>Level 3 (5-6 marks):</b> There is a thorough description which offers breadth and/or depth covering at least two different techniques relevant to the stimulus. Points are coherent and relevant, and the response is developed in order to reach a substantiated judgement in response to the question.</p> <p><b>Level 2 (3-4 marks):</b> There is a good description of at least one technique relevant to the stimulus. This should be done with accuracy. There should be some evidence of coherency within the description.</p> <p><b>Level 1 (1-2 marks):</b> There may be some basic description of at least one technique. Description may be more common sense than technical.</p> <p><b>(0 marks):</b> No credit worthy response.</p>	6	For full marks, there needs to be some reference to the stimulus which goes beyond using 'fizzy drink.'
6	(a)	1 mark for D (36 under and over eighteen-year-olds).	1	
6	(b)	1 mark for C (Thrill-seekers).	1	
6	(c)	1 mark for D (Relatives not approving).	1	

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Question		Answer	Mark	Guidance
7	(a)	1 mark for recognising Taylor as having an external locus of control.	1	
7	(b)	<p>1 mark for demonstrating an understanding of locus of control, for example, that people with an external locus of control believe they have little or no control over their lives or how other people behave whereas people with an internal locus of control believe they have control.</p> <p>Up to 2 further marks for an explanation how locus of control may affect <b>either</b> Taylor's <b>or</b> Li's decision.</p> <p>For example,            'As Taylor has an external locus of control, they choose to sit down because they believe they cannot influence change [1] and so there is little reason to be abusive' [1], or 'as Li has an internal locus of control, this may make them more likely to join the abusive behaviour [1] as Li believes they can influence change' [1].</p>	3	As the question only requires application to either Li or Taylor only <b>one</b> needs to be mentioned to gain full credit.
7	(c)	<p>1 mark for the identification of one appropriate situational factor that may affect whether Li takes part in the protest.</p> <p>Most likely answers include: presence of an authority figure, being part of a crowd or presence of others leading to deindividuation.</p>	1	As the question is 'identify' stating authority figure or a crowd or deindividuation is sufficient for the mark.

8	(a)	<p>1 mark for demonstrating an understanding of moral development. 1 mark for illustrating how moral development may directly affect morality.</p> <p>For example, 'moral development is how we develop our understanding of what is right and wrong [1], people in a lower stage of moral development focus on themselves rather than society so are more likely to be anti-social' [1], or, 'morality refers to what we believe is right or wrong [1], people in stage two of moral development are often more anti-social than those in higher stages' [1].</p>	2	
8	(b)	<p>1 mark for identifying a brain difference by structure / name that may affect anti-social behaviour. 1 mark for an elaborated response explaining <i>how</i> this would affect anti-social behaviour.</p> <p>For example, 'damage to the pre-frontal cortex [1] is linked with faulty moral reasoning which would increase the likelihood of anti-social behaviour' [1] or 'Lower volume of the hippocampus [1] may be linked to lower self- esteem and low self-esteem leads to higher conformity, even if the behaviour of the majority is anti-social' [1].</p>	2	

Question		Answer	Mark	Guidance
9		<p>For each criticism:</p> <p>1 mark for stating the criticism of dispositional explanations of obedience.</p> <p>1 further mark for an elaborated response explaining how or why this is a criticism.</p> <p>Most likely criticisms will relate to: reductionism, lack of generalisability, biases in gender and culture and limited usefulness.</p> <p>For example, 'Dispositional explanations are reductionist [1] as they do not take into account how we are influenced by people around us' [1], or 'Dispositional explanations lack generalisability [1] because the research is biased to western cultures' [1].</p>	[2+2] 4	
10	(a)	<p>1 mark for the correct ratio: 4:1</p> <p>1 mark for the correct workings:</p> <p>8 is the common divisor (32:8)</p> <p>32 can be divided 4 times, 8 can be divided once so 4:1.</p>	2	
10	(b)	<p>1 mark for demonstrating an understanding of the concept of social desirability.</p> <p>1 mark for placing this in context of the study in the source.</p> <p>For example,</p>	2	<p>For full marks, responses must refer to the results (by description) of the study to illustrate the concept of social desirability.</p>

		'social desirability refers to the participant responding to a question in a way that they feel society would expect [1]. In this study the majority of participants stated no gender preference in obeying as this would be more acceptable to society' [1].		
11		<p>Credit understanding and application of one or more ideas, or use of examples of how majority influence could be used to promote social change in relation to mental health stigma. Most likely responses will refer to nationwide campaigns such as Time for Change.</p> <p><b>Level 2 (3–4 marks):</b> There is a good description of at least one idea relevant to the stimulus. This should be done with accuracy. There should be some evidence of coherency within the description.</p> <p><b>Level 1 (1–2 marks):</b> There is a basic description of at least one idea. Description may be more common sense than technical.</p> <p>For example, 'charities [1] try to reduce the stigma of mental illness by raising awareness and normalising mental health [1]. For example, one nationwide campaign called Time for Change [1], encourage schools or workplaces to devote one day to mental health where talking about it openly helps to change attitudes towards mental health' [1].</p>	4	Reference to minority influence is not credit worthy by name or description.
12	(a)	1 mark for D (Natural experiment and self-report).	1	

12	(b)	1 mark for C (Two male and ten female American students).	1	
12	(c)	1 mark for A (An equal number of dreams and fantasies were analysed).	1	
13	(a)	1 mark for Sleep onset insomnia	1	
13	(b)	1 mark for Melatonin.	1	
13	(c)	<p>1 mark for recognising that light is an external cue (exogenous zeitgeber) that regulates biological rhythms such as sleep.</p> <p>1 mark for an elaborated response demonstrating an understanding of how light affects the 24-hour sleep waking cycle.</p> <p>1 mark for providing a contextualised response.</p> <p>For example,            'Light is an external cue or exogenous zeitgeber that regulates biological rhythms.[1] When Ali [1] is exposed to light, the SCN in their brain sends signals to delay the release of melatonin keeping them wide awake and alert' [1].</p>	3	For full marks, there must be some application to the source by name (Ali) or by description or example.
14		<p>1 mark for each of the following:</p> <p>Freud believed the <b>unconscious mind</b> contained desires, urges, and thoughts that are unacceptable to the conscious mind. According to Freud, the actual content of dreams including the images, thoughts and content contained in the dream is related to the <b>latent content</b>. Freud believed that this served to disguise</p>	3	

		the <b>wish fulfilment</b> or the unconscious wishes of the dreamer.		
15		<p><b>AO1 marks</b>            Description of theories of sleep and dreaming including The Freudian Theory of Dreaming and/or The activation synthesis theory of dreaming. Description of a theory / theories relating to at least one other different area of psychology (for example, those relating to memory, theories of clinical depression, theories of development or criminality).</p> <p><b>AO3 marks</b>            Valid critical evaluation points relating to reductionism in relation to The Freudian Theory of Dreaming and/or The activation synthesis theory of dreaming. Valid critical evaluation points relating to reductionism in relation to a theory/theories relating to at least one other different area of psychology (for example, those relating to memory, theories of clinical depression, theories of development or criminality).</p> <p><b>AO1</b>  <b>Level 3: (5-6 marks):</b>            There is a <b>good</b> description of theories of sleep and dreaming <b>and</b> at least one other theory from a different area of psychology.            This is done with accuracy and clarity. The information presented is relevant and substantiated in a good structure.</p> <p><b>Level 2 (3-4 marks):</b>            There is a <b>reasonable</b> description of theories of sleep and dreaming <b>and</b> at least one other theory from a different area of psychology.</p>	13	<p><b>For AO1:</b> to be placed in Level 2 or above, the response must refer to <b>both</b> The Freudian Theory of Dreaming/The Activation Theory of Dreaming <b>and</b> at least one other area of psychology.</p>

		<p>There may be some inaccuracies though most of the information presented is relevant. The response has a reasonable structure.</p> <p><b>Level 1 (1-2 marks):</b> There is a <b>basic</b> description of theories of sleep and dreaming and at least one other theory from a different area of psychology.</p> <p>This may include some inaccuracy. The information has some relevance though there will be inaccuracies. Structure will be weak/poor.</p> <p><b>(0 marks):</b> No credit worthy response.</p> <p><b>AO3</b></p> <p><b>Level 3 (6-7 marks):</b> There is a <b>thorough</b> evaluation which offers breadth and/or depth <b>covering at least two different points</b> in relation to reductionism. Points are coherent and relevant and the response is developed in order to reach a substantiated judgement in response to the question.</p> <p><b>Level 2 (4-5 marks):</b> There is a <b>good</b> evaluation which offers breadth and/or depth covering <b>at least two different points</b> in relation to reductionism. Points may be brief but should still be relevant and used to reach a supported judgement in response to the question.</p> <p><b>Level 1 (1-3 marks):</b> There may be some <b>basic</b> attempt at evaluation but it will be weak. Judgements will be either unclear or absent.</p> <p><b>(0 marks):</b> No credit worthy response.</p>		<p><b>For AO3:</b> to be placed in Level 2 or above, the response must refer to <b>both</b> The Freudian Theory of Dreaming/The Activation Theory of Dreaming <b>and</b> at least one other area of psychology.</p>
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16	(a)	1 mark for Covert participant observation	1	
	(b)	<p>1 mark for outlining a strength of (covert participant) observations</p> <p>1 mark for illustrating this strength using the source.</p> <p>For example,</p> <p>'one strength of observations is they are more ecologically valid [1]. In this observation the observer pretended to be a teacher so she could see how the students behave in normal lessons' [1], or 'Covert observations have less observer effect [1] and the students do not know they are being observed they will not behave differently' [1], or 'as the observer is pretending to be a teacher, she is participating in the lesson [1] so can get be more accurate in her observations ensuring they are valid' [1].</p>	2	<p>If a strength is given to an alternative type of observation, credit 1 mark as long as the strength does pertain to that stated in (a). For example, if the candidate has stated 'overt observation' in part (a), they could still gain 1 mark for stating a strength that pertains to this. They cannot gain the second mark as this is AO2 and the context would be incorrect.</p> <p>For full marks, there must be some application to the source by description or example, e.g. teacher, students.</p>
17	(a)	<p>1 mark for demonstrating knowledge of a self-selected sampling technique</p> <p>1 mark for illustrating how this could be achieved for the study in the source.</p> <p>For example,</p> <p>'the psychologist could have placed a poster in the canteen of the school [1] asking for students who would like to take part in a study to contact her using the details on the poster [1].'</p>	2	For full marks, there must be some application to the source, e.g. reference to students, school/college.
	(b)	<p>1 mark for the mere identification of one way the sample in the source may affect generalisability.</p> <p>Most likely answers will refer to: Cultural, Age, Occupation, Size or use of the Opportunity sampling technique.</p> <p>1 further mark for illustrating <b>how</b> this identified feature would impact on the generalisability of the findings in context of the study in the source.</p>	2	For full marks, there must be some application to the source, e.g. reference to students, school/college.

		<p>For example, 'the sample in this study were students all from one class in one school [1], this would lack generalisability to all students from different schools as they may be unique group of students' [1], or 'As the sample were all students in one class, they will all be the same age [1], students of different ages may use digital technology differently so the findings may not be generalisable' [1].</p>		
18		<p>1 mark for demonstrating an understanding of construct validity 1 further mark for an elaboration placing the justification in context of the study in the source.</p> <p>For example, 'construct validity refers to how well something measures what it is designed to measure [1]. Using an observation could have high construct validity as the observer can actually see how the students use digital technology (rather than asking them as they may lie)' [1].</p>	2	For full marks, there must be some application to the source, e.g. reference to students, digital technology, texting.
19		1 mark for recognising the psychologist counted the number of males and females use of tablets	1	The response must be in context of the source to gain credit. Definitions of quantitative data (numerical data or not language based) are not credit worthy.
20	(a)	<p>1 mark for the correct percentage: 69% Up to 2 marks for accurate workings: <math>(29 + 13 = 42)</math> <math>29 \div 42 = 0.6904761905</math> <math>0.69 \times 100 = 69.04761905</math></p>	3	For full marks, the answer must be to 2 significant figures.

	(b)	<p>1 mark for an appropriate conclusion stating that there are sex differences in the way digital technology (such as tablets and mobile phones) is used to support learning (where females are more likely to use it for learning purposes).</p> <p>1 mark for reference to the results from the source. For example recognising the percentage difference between females and males, e.g. females is higher, males is lower, a difference of 12%/29 females compared to 12 males used digital technology for learning purposes.</p>	2	Reference to the results table can be in the form of percentages or raw data.	
21		<p>1 mark for ticking the second hypothesis 'Digital technology such as tablets and mobile phones will be used more by participants to support their learning rather than as a distraction'.</p>	1	If more than one box is ticked, no credit can be awarded.	
22		<p>1 mark for demonstrating an understanding that observer bias is when a researcher sees what they expect to see (implying subjectively).</p> <p>1 mark for demonstrating an understanding that observer effect is the effect on behaviour when people know that they are being observed.</p> <p>For example, 'observer bias is when a researcher interprets the behaviour he or she sees in a way they expect, whereas [1] observer effect is when people may change their behaviour because they know they are being observed' [1]</p>	2		

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